MANUFACTURERS' RECORD.

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Manufacturers' Record.

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BALTIMORE, JANUARY 8, 1897.

An Important Announcement.

Attention is invited to the full announcement on advertising page 23 of this issue, giving some details of the "Special Seaboard Air Line Supplement," shortly to be published. Of this Supplement, which will be handsomely printed, with cover in colors, the Seaboard Air Line has ordered 10,000 copies for distribution among leading business men in the Middle and New England States. In Mr. St. John's letter, as published on page 23, he expresses a hope that every leading business concern-manufacturing and mercantile-and every town and county along that system will be fully represented in this Supplement.

One of the Carnegie furnaces at Duquesne, Penn., built to turn out 480 tons of iron a day, produced for November an average of 572 tons. It has for one week averaged 610 tons a day. and the managers expect eventually to be able to turn out 1000 tons of iron a day to the furnace. It was but a few years ago when a furnace of 150 tons daily capacity was regarded as the outside limit. What a revolution this Carnegle furnace has made!

The Atlanta Journal, in reviewing the business interests of that city for 1896, says the business year recorded a larger volume than any of its predecessors. It brought only two important failures, one of which will pay all creditors in full and the other will probably do nearly as well. The close of the year witnessed the opening of Line depot are far advanced, and other important structures are under way. Isn't the Journal badly mistaken? The politicians sought to make the world believe that Atlanta and Georgia were in a very bad way and going steadily to ruin for the lack of free silver. If the Journal is correct, what becomes of the statements of others?

A Suggestion to Southern Railroad Owners and Officers.

The Pennsylvania Railroad is reported to have placed contracts for 40,000 tons of steel rails, three-quarters of the orders going to mills along the line. The road geuerally starts in early, in order to aid its line mills by the encouragement which its example is supposed to afford other intending

How many Southern railroads follow this wise policy of the Pennsylvania in giving all orders, as far as possible, to enterprises along their lines? This policy is largely responsible for the magnificent industrial development of the territory tributary to the Pennsylvania. By this kind of practical encouragement it creates and sustains industries and it is repaid a hundred-fold by the traffic thus created.

The railroads of the South owe it to

themselves and to the people to encourage industrial development, to aid to the utmost in furthering the agricultural interests and in drawing immigration. Such a line of policy not only pays in the way of direct traffic returns, but it creates a popular sentiment in favor of the railroads the value of which cannot be measured. Instead of hostility to corporations and constant efforts to legislate against them, there would be a public sentiment in their favor that would in many ways prove of incalculable value to railroads. The Illinois Central, the Seaboard Air Line, the Plant system and the Kansas City, Pittsburg & Gulf are conspicuous examples of the value of winning public favor by convincing the people that they are working for the advancement of all interests along their lines, and are striving to increase the prosperity of the people by bringing in settlers, encouraging manufactures and advancing the interests of farmers and of the railroad employes. Half a million dollars would be a low estimate to put upon the value to the Illinois Central of the public favor and wide commendation secured by the plan of President Fish to enable the employes to become stockholders, and the effort of the Seaboard line to establish 100 experimental farms and to encourage the raising of better stock is worth as much to that road, for it has strengthened the sentiment of the whole South in its favor. Concessions from the public when wanted, rights of way for new lines, municipal privileges, a friendliness that will avoid hostile legislation, are among the direct results that become valuable assets to these roads. Other roads may they are they keep their light hid under bids for a 12-story office building. The a bushel. No one can travel through Austell Building and the Seaboard Air | the South without being impressed | with the strength of public sentiment in favor of some reads and of the bitter hostility to others. There must be a reason for these things, and it will pay the owners of railroads, the stockholders and bondholders, as well as the officials, to study the whole situation and see if the reason why the

round popular railroad in the United States, and probably on the whole the most profitable, is not because of the fact that it has for years pursued a line of policy that is being vigorously followed by the Seaboard, the Illinois Central, the Plant system and a few

A Question of Southern Wages

Referring to a recent editorial in the Manufacturers' Record in regard, to the organization of labor unions in Southern cotton mills, the Sequachee (Tenn.) News makes it a personal matter and says:

Would Mr. Edmonds, or any of the privileged classes he writes for, like to come here and work for forty or fifty cents a day? A man cannot live on pure air or water. Neither can his wife and children.

• • • We never have nor ever shall believe there is any advantage to any section in cheap labor. There is certainly no merit in it to us, and with what has been told us lately about the pauper labor of Europe, are we not trying to make American labor pauper labor? When mechanics cannot organize for their mutual benefit without being charged with making discontent and being a curse, it is time to cry a halt.

If the Manufacturers' Record represents any "privileged class" it has not been aware of that fact. It has supposed that its work covered everything that tended to the upbuilding of the South and to the creation of employment for labor. It believes in high-priced labor as the cheapest labor, measured by production, and because the higher the wages the greater the comforts and blessings that can be enjoyed by the laborer and his family. Well-paid labor is one of the best blessings that any section can enjoy. But the Manufacturers' Record has no faith in the work of the "walking delegate," nor in the professional labor agitator, such as Mr. Howard, who sought to organize the textile laborers of the South. Mr. Howard, a paid official of the New England labor unions, might well desire to foment discord among Southern operatives, hoping thereby to retard the progress of Southern cotton manufacturers, in order that the New England mills might have less competition. But while there are thousands of people in the South eager for employment, that they may earn a living, and while the building of new cotton mills is the only possible chance for them to secure work, the Manufacturers' Record will oppose every movement calculated to retard the growth of this industry without regard to whether it has to be doing equally as good work, but if criticise the acts of the mill owners or complaining cotton-raisers around him, the South cannot be secured by trade organizations so long as there are two idle hands anxious to take the work of every hand now employed at present wages. What is needed is an increase of employment, a diversification and extension of manufactures and increased skill of the laborer, and with these will come a gradual and healthy advance in wages. "It is a condition, Pennsylvania Railroad is the most all- and not a theory," that confronts us.

"Material Affairs."

Blizzards in the North and spring weather in the South. But what a plucky people the Northerners are to have built up such a mighty civilization in such a climate.-Augusta Chronicle.

All the more credit to them, with some discredit to us, for not having accomplished even more than we have in the develop-ment of the South. The South needs to take account of the untiring energy and persistent hustle of the men who have developed "such a mighty civilization" despite the natural disadvantages of the Northwest.-Manufacturers' Record.

There has been remarkable enterprise displayed at the South, and a majority of our people are still striving to "do the best they know how." One of our most energetic men, the late John H. Inman, is said to have gone to New York from the South because, to make a great deal of money, with his gifts for accumulation, it was necessary, in his opinion, to be where the cash was abundant and the opportunities greatest. Southern men at the North are among the most alert of mankind.

In what way are we of the South to increase our diligence profitably under existing financial or commercial conditions. Some of our so-called "developments," one reason or another, have not paid. The persistent "hustle" of the Northwest, while full of magnificent intrepidity and wonderful material results, is not unaccompanied with calamity. Chicago is a mighty city, but many thousands of its inhabitants are starving, and it is the abode of all nations, some of whom are not exactly desirable. apprehend that the Manufacturers' Record is too intent upon merely material prosperity and sees in that the chief good to man. The South may be the poorest tion in worldly matters, largely due to unfair legislation, but she is probably the happlest, and, in comparison with the West, better off as she is. If our people have no great amount of surplus money they cannot invest in enterprises any faster than they are now doing. Besides, it is a puzzle for those who are fortunate enough to have cash to spare to know where to put it profitably, outside of gilt-edged stocks and bonds .- Au-

The Chronicle in the third paragraph rather takes issue with its own editorial of the first paragraph published a few weeks ago. Moreover, the Chronicle is just a little unfair, due to its love of free silver. There is room in the South for energy and work and profit; there are thousands of men railing against hard times who could make times better for themselves if they would work a little harder. Some years ago the writer was talking with a young man in North Carolina who was then building himself up by ceaseless work night and day, a man who is now known as one of the most progressive and prosperous men in the South. Self-educated, with technical training secured by working his way through college, he never wasted time complaining. Turning to some of the the mill operatives. Higher wages in who were loafing fully one-half of the time, he said: "It is failure to work that is keeping you poor; if you will work as hard as I do and stop grumbling you need never complain of not being able to make a living." To a large extent that is true. Most successful business men average twelve hours or more of close application to work every day. Do the farmers who are complaining do as well? The Manufacturers' Record fully admits the discouragements and disadvantages under which the whole country has labored, but can the Chronicle say there is not some just ground for criticism of many of the non-workers?

The Chronicle fears that the Manufacturers' Record is "too intent upon material prosperity as the chief good to man." The Manufacturers' Record is devoted to material and not to spiritual affairs. Therefore it presses the material end upon its readers. But come, now; is it not universally admitted that the first effort to advance the spiritual interests of a man must be to supply his material necessities? If you feed and clothe the starving first, can you not reach the spiritual nature better than by trying to reverse the situation? The South has thousands and tens of thousands of people who cannot read or write, who are in the deepest poverty, because a lack of material advancement makes it impossible for them to find employment. If we can aid in building factories, in drawing capital and in diversifying and increasing employment to the end that these people may secure profitable work, will it not be an easier task then for the Chronicle to secure better school and church facilities, better roads and better homes, and to make farm life more attractive than if it should decide to push these things first and ignore all material affairs?

The South Asking for a Protective Tariff.

With a vigorous demand from the South for a protective tariff on rice, sugar, lumber and cotton, the ultra free-traders are beginning to see what the Manufacturers' Record has long claimed, viz., that the time would come when the stronghold of a protectivetariff sentiment would be found in the South. Against the cotton of Egypt the long-staple cotton-growers of the South find that they must have protection, and all the talk of free-trade politicians to the contrary cannot stop this demand. The sugar and rice people and the lumber interests of the South are as insistent in their demand for an adequate tariff as the iron people of Pennsylvania ever were for protection to pig iron. Commenting on this, the Worcester (Mass.) Spy says:

The Southern cotton planters who raise what is known as the long staple are about to ask the ways and means committee of the House to insert in the new tariff act a duty of three cents a pound on importations The Vicksburg Exof Egyptian cotton. change has requested Congressman Catchings to go before the committee and urge the imposition of this tax, because the Egyptian staple "is not only reducing prices below the cost of production, but is graunally driving planters to abandon its production entirely. In 1884 and 1885 less than 7000 bales of Egyptian cotton of 500 pounds weight were imported into States. Last year there were 110,000 bales. As this cotton is entirely the product of what is usually called 'pauper labor,' it is imported into this country and sold at prices that render American competition impossible.

The Exchange argues the case in these terms

'If there is an honest purpose to protect American laborers against the pauper labor of Europe and the Oriental countries, as is claimed by prote South appeal with peculiar emphasis for a share in this policy in having the revenues for governmental purposes so adjusted as to protect them against the pauper labor of Egypt. We trust, therefore, you will bring matter before the above-mentioned committee as soon as possible and bring all legitimate influences to bear to secure a tax of at least three cents a pound on Egyptian cotton imported into this country.'

The cotton planters of the Mississippi delta have always held extreme free-trade views, and have strongly opposed protective duties of any kind. The Egyptian cotton has been

hurting them for several years. When the McKinley tariff bill was passed there was an attempt made to induce the planters to ask for protection against Egyptian cotton, and it was hinted that if they did so their request would be granted, as it was especially desired to have the protection feature of the law supported by the large cottongrowing interests of the South. The sentiment of the cotton growers at that time, however, was too strong against protection in any form to permit of the adoption of resolutions asking for a duty on cotton.

Since then the importation of the Egyptian product has quadrupled and destroyed the market for nearly half the long-staple cotton raised on the Mississippi river. The result is a surrender of the principle of free trade and a demand for protection, which has the support of nearly all the growers of cotton on the Mississippi river.

Southern City Building.

[Augusta (Ga.) Chronicle.]

In an article on "How Cities Are Built," in the "Southern States" magazine, of Baltimore, an important truth is cited and emphasized. It is true not only in the matter of city building, but in building up a business of any kind. The writer says "any advertising is better than none, but the benefit from a year's advertising is infinitely greater than twelve times one month's advertising, and the shrewdest advertiser is

he who never stops at all." Advertising by spurts is better than not advertising at all, but the business that would thrive, the city that would grow, must advertise all the time. Its benefits are cumulative. January's advertising is not lost in December, provided it has been kept up through the year. Readers who look on the advertisement casually at first become more impressed with it as it forces itself before their eyes time after time. Presently they will read the plagued thing just to see what the fellow is talking about so much. When they read it they may not be wanting anything in that line, but as the days go on and the familiar advertisement continues in view, circumstances arise under which they do want the article advertised, and at once they remember that advertisement and decide there must be merit in a thing that persistently keeps before the public, and they become purchasers. This is not a single experience, but the experience of thousands, so that the advertise ment which met with discouraging returns at first now begins to yield a rich harvest. Any man who has had extended experience in business as an advertiser will bear out the truth of this theory.

The city that would reap results from advertising must keep at it. A spurt for one year is better than no effort at all, but the city that wins is the one that keeps at work. Publicity and promotion are the avenues to success for expositions and special undertakings by a community, and they are equally puissant factors in the development of cities themselves. Southern cities must keep themselves and their attractions before the public, must constantly exploit their attractions and advantages.

If the South wants immigrants from the Northwest, let the invitation be continuous and persistent. Well-directed effort planted Fitzgerald in Georgia, and similar efforts can produce similar results elsewhere in the State. Lands are cheap in all sections of Georgia, and they will grow any sort of crop with proper cultivation. Nowhere in the State can greater advantages be furnished than in the territory tributary to Augusta, and the work which this city has done in the past through the Young Men's Business League and other channels must be kept up if Augusta wants to keep up with the procession. The politicians and business men promise us next year a return of prosperity. Let us be ready to move forward promptly without any hanging back on the breeching straps. The new year is at hand. Let us keep abreast of the front

The Chronicle has fully stated the whole case. Steady, persistent advertising, month after month, year after year, must be the plan of work of every town or city that hopes to attract public attention. The town that advertises once and then waits to see the result. or the town that, because one advertisement brings no immediate tangible results, refuses to keep on advertising. should study the Chronicle's statement of the case. As eternal vigilance is the price of liberty, so eternal advertising is the price of success. Do you want success? If so, adopt the only means

not spasmodic efforts.

The returns so far received show that the production of gold in the United States for 1896 was between \$51,000,000 and \$54,000,000, against \$46,600,000 in 1895. It is estimated that the world's output was about \$215,000,000, or a gain of at least \$12,000,000 over 1895.

The St. Augustine (Fla.) News, commenting on an editorial in the Manufacturers' Record, says:

This is right. In urging our people to diversify their productions, to raise their own supplies and to consider it disrepntable to hang around country stores while the farm needs attention, it is leading in the path to success. The Manufacturers' Record is full of excellent advice for any locality, but especially for the South it is brimful of thought well calculated to develop public spirit, arouse dormant energies and stimulate a desire to go forward and develop our boundless resources. It is pursuing a course that all should approve and strive to follow.

The future historian of Baltimore will need no better insight into the change that has taken place in the life of this city during the last five years than to compare the Baltimore Evening News of today with the same paper of five years ago, just before it passed into its present management. The broadening out of every phase of business and educational life, the activity of the people of Baltimore in independent political action, the successful fight against ring domination, have all come about during this period, and no one who has watched the way in which the News has led in all these matters can fail to give to it much of the credit for these important changes. The News easily ranks as one of the very foremost afternoon papers of the country.

Evidently a Bad Case of Indigestion.

The Ocala Banner. F. E. Harris, Editor and Proprietor. Ocala, Fla., January 2.

Editor Manufacturers' Record: I am appalled at the attitude of your paper. Pardon me for observing that its aim and purpose and end seems to be to induce capitalists to invest their money in sections and communities by a pretense and false show of prosperity.

With you and your correspondents it has come to the pass that a man must be denounced as dishonest and a demagogue who tells the truth. You lent your columns to the election of McKinley, and pretended to believe that a great majority of your fellow-citizens in the South had suddenly gone daft: that a discussion of the silver issue had made them lunatics and veritable asses. You closed your eyes to methods that were as disgraceful as any crimes that blacken our calendar and continued to prate, even into unwilling ears, that the election of McKinley would restore confidence and inaugurate an era of prosperity the like of which had not been known in the world's history. You made these statements, you said, by virtue of your being in touch and elbow with the manufacturers and capitalists of the country. You spoke as if by the card. You assumed the role of a prophet. By courtesy we will admit that McKinley was elected; at least, Mark Hanna and his money bags were triumphant. Confidence has not materialized, and it is a sham to say that it has; but, because we do not say so, you proclaim us dishonest.

Prosperity has no more followed Mc-Kinley's election than it followed the repeal of the Sherman law three years before, which was so confidently predicted. The spectacle is given us of old-estab-

of securing it-eternal advertising, and lished banks closing their doors, factories cutting wages and shortening hours, big mercantile houses going down with a crash, newspapers passing into the hands of the sheriffs with the false cry of "prosperity" on their lips, and when we unsophisticated country editors, not yet versed in the art of assimulation, make truthful comments anent these terrible conditions we are denounced as demagogues and common enemies; and one of your correspondents, Mr. Wm. E. Ashley, of Raleigh, N. C., speaking of us, asks: "Has the silver lunacy destroyed their honesty and truthfulness?" Permit me to ask Mr. Ashley if it has come to be dishonest to comment on conditions as they actually exist? Must we poor, deluded "silver-craze" editors lie to be patriotic? Are we expected to stifle truth and muzzle convictions in order to make a false pretense of prosperity? Must "SHAM," in big letters, be the motto for the new year, and must we country editors follow the example of the Manufacturers' Record and bow down and worship at its false shrine? Is this the type of prosperity that McKinleyism promised? Must we brand the "calamity-howler" as a common enemy and crown the "prosperity-liar" with a laurel wreath? Let's do away with "sham" F. E. HARRIS. and tell the truth.

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In answer to the foregoing it is only necessary to say that it is absolutely false, first, as to our seeking to misrepresent the true condition of business affairs, and secondly, that the Manufacturers' Record has used abuse for argument against the silver people. The Manufacturers' Record has constantly sought to have its Southern readers send in an exact state of business, and has as freely opened its columns to adverse reports as to favorable ones. If more than nine-tenths have written favorably of the business outlook, and the writers have been such silver men as Governors Johnston, of Alabama, and Evans, of South Carolina, and leading manufacturers and general business men, Mr. Harris must insist that they are willful liars, or that he is-slightly in error. The Manufacturers' Record during the campaign constantly invited discussion, and gave just as fair and full a showing to anybody who wanted to write in favor of silver as of those who opposed it. As to the question of prosperity, the Manufacturers' Record has not supposed that intelligent men expected that the election would immediately, in one day, start all the wheels of industry to revolving, nor that the election of Mr. McKinley-or of Mark Hanna, whichever Mr. Harris may prefer-would stop the failure of such banks as had already in reality been wrecked by swindling officials, nor of those which, through unwise management, had become loaded up with worthless collateral. But the Manufacturers' Record did think that the fight of the silver people was against the banking power. These terrible inventions of the Evil One seemed to be the bane of business life, the destroyers of our prosperity, and the stock argument of the silver writers and orators was that the banks were growing rich and powerful at the expense of the people. The banks were denounced as the enemies of mankind, and now Mr. Harris is howling because a few of the "enemies" are being killed off. He is rather inconsistent. However, the whole letter only shows the absurd lengths to which some fanatics will go. The honest silver advocates, of which there are many, are always ready to give credit for honesty of conviction to their opponents, but men of Mr. Harris's stamp

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must pose as the only honest men and the only men of any conviction. The Pharisees took the same position.

VIEWS OF COMPTROLLER ECKELS.

The Banking Situation of the South Very Strong.

Washington, D. C., January 5. Editor Manufacturers' Record:

In a communication recently addressed

to the editor of the Atlanta Journal I undertook to state briefly some facts which, to my mind, indicate how groundless is the suggestion that the country is either entering upon or approaching a bank panic. The inquiry then made of me was not unlike your own, and touched particularly upon the banking conditions in the Southern States. The strength of those conditions cannot better be evidenced than by the fact that during the report year of 1896, which embraced the most trying portions of 1895 and 1896, there occurred but six national bank failures, while since November 1 the failures have numbered but two. Of these two, the bank at Roanoke, Va., has proven solvent and arranged to pay its creditors without the intervention of a receiver and go into voluntary liquidation. As against these two failures we have a condition of improvement in the cash reserves of the banks in the South as shown by the bank call of December 17 over that of October 6, which proves how much money must have been brought out of hiding since election day. The two States thus far reporting, Mississippi and Arkansas, show an increase from 29.42 per cent. to 32.61, and from 30.49 to 39.65, respectively. Of the reporting cities in the South the returns from Louisville show an increase from 36.90 to 41.02; St. Louis, from 25.95 to 31.84; Houston, 67.17 to 74.57; Baltimore, 30.89 to 35.31; New Orleans, 31.42 to 32.74, and Savannah, from 28.20 to 39.46. When it is remembered that the requirement of the law, based upon that which is deemed the point of safety, requires a reserve of but 15 per cent. in the States generally, and but 25 per cent. in reserve cities, it is readily seen how able the banks are to meet every demand to be made upon them by Southern depositors. It is a noteworthy fact that throughout the South prior to 1892 the number of large enterprises undertaken enlisted much foreign and domestic capital, and not a few unhealthy booms were created, and yet, despite all this, the bank failures in that section have been comparatively few, and the losses entailed upon shareholders and creditors comparatively slight. It is safe to say that if the panic of 1893, preceded as it was by three years of sudden and unusual investment of capital in the Southern States, did not produce more failures than then occurred, there will be now, with the banks thoroughly strengthened in cash means and rid of many undesirable assets, not a sufficient number to create any unusual comment. The excitement incident to a long political campaign necessarily disturbs business relations and makes investors hesitate to invest. The effect of | ful platform, with the promise once more

the result of it, however, upon bank deposits and the cash holdings of the banks is readily to be seen. If there could now follow a season of rest from agitation and undivided attention given to trying to accumulate through individual effort instead of through the force of enacted law, prosperity could not fail to come to our country. For four years the business interests of the United States have languished because of agitation. Some of these interests have succumbed, but the number failing has been but a small percentage of those which have continued in trade. A constant scrutiny has been attendant upon all banking and other financial institutions during the same period, and yet only here and there has a failure occurred. The credit of the country and the monetary standard which it maintains have also been subjects of congressional, platform and newspaper discussion, but the one has been upheld and the other not lowered. If in the midst of all these things and in the face of such adversities bankruptcy has been kept far off and solvency marked the condition of the great majority of those in the banking and business world, it is not unreasonable to maintain that during a period free of such things the individual citizen's financial status will improve and prosperity to his country be restored.

> JAMES H. ECKELS, Comptroller of the Currency.

The Nicaragua Canal a Necessity.

San Francisco, Cal., December 27. Editor Manufacturers' Record:

Your issue of December 19 contains an article from Mr. Nimmo, which requires a brief reply.

I may be permitted to premise that deprecation of personalities comes with bad grace from one attacking the integrity and honest intentions of parties differing with him. During the sixteen years' discussion of transportation in connection with the canal, I have strictly avoided personalities, even when public feeling on this vital subject ran high on the Pacific coast, until Mr. Nimmo questioned the honesty of purpose of all advocating the cheap waterway between the oceans, which he strives to destroy with his pen and so-called "statistics." Mr. Nimmo asks proponents of the canal to join him in demanding investigation by Congress. Who objects, or objecting, prevents it? Have not Congress and other departments of the United States government been investigating for a quarter-century or more? Have not volumes of evidence been piled up on the Nicaraguan canal question by enemies of the project, Eads, de Lesseps and able attorneys retained for the purpurpose by adverse interests, as well as by friends of the canal who have recognized its national importance and the beneficent results that must follow the elimination of a navigation equal to over one-third the circumference of the globe? No friend of the canal objects to investigation on any line, honestly conducted. On the contrary, the more of it there is the greater will be the demand for the canal. It is investigation that has made the canal a national demand, reiterating itself every Congress until the government secures to our country this beneficent work. But Mr. Nimmo, with investigation. wants more delay. In fact, from his railroad observations it may be seen that delay is the primary object, with investigation in the hands of the enemies of cheap transportation. Delay costs the people of the Pacific coast millions every year, and they have waited for the canal sixteen years; promised it by both political parties and by presidential candidates, with promises that have remained unfulfilled. Our people have just voted on a success-

repeated, and now that votes are counted we have a voice from an enemy of the Pacific coast for investigation and-delay.

Mr. Nimmo reiterates his idea that no tonnage will use the canal, and each time he writes decreases the amount which the canal will control. His latest estimate is less than 400,000 tons per annum, and his proposed canal toll over \$18 per ton! The child-like simplicity which asks credence for such absurdities will only be equalled by the ignorance, if it can be found, that will accept them. In 1896 the Pacific coast alone will send westward via Cape Horn and Panama about 800,000 tons of cereal products. A careful calculation recently made proves that had the canal been open, and Suez rates charged, a saving would have resulted of \$1,960,000 on Pacific coast freights carried by cargo steamers. Imagine a short waterway open to our lumber, wines, brandy, dried and fresh fruits, nuts, asphaltum, ores, beans, salmon, wool and other products, steadily increasing in quantity, and add thereto the cotton of the South to Japan and China, the coal and iron of Alabama to Central and South America, the manufactured goods of Europe and from our Eastern States, the European immigrants to the Pacific coast, the teas and silks of Eastern Asia to Atlantic ports, the wool and meat products of Australasia, the coffee of Central America, the nitrates and ores from the South American west coast, and the products of Oceanica, steadily increasing in volume-imagine this, and the absurdity of Mr. Nimmo is apparent. The Pacific coast of the United States is competent to comfortably sustain 35,000,000 people. It has now less than 1,750,000. It has, as stated by an eminent authority, "everything to offer the emigrant, except-cheap transportation." The railway systems reaching it need the canal to complement their usefulness, by the carriage of the cheap and bulky products which they do not and cannot carry at a profit, and which will leave a profit to the producer, thus inducing immigration and creating railway

Consider the immense constwise commerce which will use the canal, with even 5,000,000 inhabitants, and it opens the question whether the limit of 20,000,000 tons annually, with one lockage system, will be competent to move it. I have no doubt that ultimately a duplicate lock system would be necessary.

There is at this time much interest manifested in the resuscitation of the American mercantile marine. So far as coastwise shipping is concerned, nothing will so rapidly increase it as the Nicaragua canal, which will pass a procession of American steamers, with full cargoes both ways, aside from vessels in the foreign trade.

It will create a demand for steam shipping that will keep our ship-yards busy for years.

And this sea-borne commerce will not injure land transportation interests, for as the Pacific coast increases in population, the demand for overland transportation will increase. An official high in the service of the Southern Pacific Company assured me a few days since that their efforts to bring immigration to the Pacific coast had been comparatively unsuccessful because the connecting lines East had the control and were interested in settling them on lands tributary to themselves, while if low rates were named via New Orleans the Eastern roads would combine to contest their right to cut into the traffic and retaliate. But why should immigrants come here when the products they raise cannot find a market at rates that leave a living for them? They cannot all pay rail rates charged on oranges. The more the tonnage question of the

canal is investigated, the stronger will become its position; but the subject should not be investigated by anyone who has made up his mind in advance that the canal is not needed, that it will command no tonnage, and that land transportation alone is competent to serve the commerce of the world. WILLIAM L. MERRY.

A South Carolina View of the Situation

Bureau of Freight and Transportation of the City of Charleston.

Charleston, S. C., December 28. Editor Manufacturers' Record:

Replying to your letter of the 18th inst., asking for my views upon the general business outlook for the country, I take much pleasure in communicating them to you. So great is my appreciation of the magnificent work your journal has done for the South, that any service I could render to the Manufacturers' Record, whatever labor that gervice might entail. I could not regard in the light of a task, but should rather look upon it as a duty that I could not conscientiously neglect or put aside. I must ask, however, to be permitted to confine my remarks to that section with which I am most familiar, the Southern States, and indeed to the conditions of which section only have I given sufficient study to justify the expression of my views.

When a country has reached one of the epochs of its life, and is preparing itself for another period of progress under new conditions, it is well for every thoughtful man to turn his eyes from the recent contentions of the past to what promise of better things the future holds in store for us. Therefore, letters of this character, which you state it is your purpose to incorporate in your New Year's issue, I consider most opportune and appropriate.

With the settlement of the question of free silver at the false ratio of 16 to 1, in repudiation of both public and private debts, which issue has been buried too deep to be again resurrected, the country may indeed be said to have passed an epoch in its history. This contention, and the others springing from it, provoked by the articles of the Chicago democratic platform, are the contention to which I refer.

With the settlement of the silver question a sense of security has been re-established amongst all kinds of business. Of this increased security one of the most unfailing effects will be a great increase both of production and accumulation. Industry and frugality could not exist where there is not a reasonable probability that those who labor and spare will be permitted to enjoy.

I believe that the material development of a country is as completely under the control of natural laws as is bodily growth. Consistent with that idea, that another era is dawning for the South, nobody who has given study to its present conditions, to its accomplishments of the past thirty years, which stand out like prodigies of romance rather than as realities, and to its possibilities for future development, can for one moment doubt. With its splendid agricultural resources, unequalled anywhere on the globe, the development of which, at least in variety of crops, has but barely begun, its vast timber area of both hard and soft woods, its unequalled mineral deposits, admitted by all geologists to be infinite in variety and boundless in quantity, the South in the development of all this either must go forward with tremendous strides in the very near future. or its advancement will only be through the slow causes of natural accretion. In a country with resources so inviting to capital and enterprise, the latter state would practically amount to stagnation. Such a situation is beyond the range of possible things. The man of the new South will not permit such a condition to exist; he has become too thoroughly imbued with the spirit of enterprise of the East and West. He realizes that the touchstone of his capacity is his business power-that capacity which is the product of civilization, and, in a particular direction at least, the best gage of its development. He realizes that the condition of success is not merely that effort shall be constant, but also that the force of the effort shall be increased. The pride of success will spur him on to keep up the splendid measure of development that his section has already reached.

A master mind has said, "there be three things which make a nation great and prosperous-a fertile soil, busy workshops and easy conveyance of men and goods from place to place." Nature has done everything for the South as to soil, and chiefly through her own energies in inducing the investment of Eastern and foreign capital, and by county and State subsidies she has constructed a system of railways that afford quick and easy communication with every State in the Union. But in the matter of busy workshops, compared to the East or West she is as yet but as an infant to a strong and vigorous man. Of the vast quantity of goods manufactured in this country, the portion made in the South is insignificant indeed. It is to the expanding of its workshops that the South will address itself in the coming few years, and in doing so it will be but in pursuance of natural laws. Everything is favorable to manufacturing in the South-cheap fuel, cheaper than in New England or the West, abundant water-power, an ample supply of labor and a mild and equable climate, bringing the cost of living to a minimum. Every town and city in the South should bend its best energies to the furthering of its manufacturing interests. Individuals should learn the virtue of co-operation and be a strong cohesive force, and not stand apart, a lot of scattered units. With intelligent cooperation there is no predicting what development in manufacturing a community may not secure for itself.

In my judgment an era of prosperity is just commencing for the South such as it has never enjoyed before. Both in domestic and foreign markets will the wide expansion of its trade be achieved. But intercourse with the latter must not be checked through high protective duties by the incoming administration, for we may be sure that any prohibitive duties imposed by us will, in certain quarters at least, provoke retaliatory action. Only, too, can the expansion of the entire nation's foreign commerce begin to vie with that of certain of the European powers, and more especially so in South American countries, when we have succeeded in developing our merchant marine. To the importance of that task, and to the Nicaraguan-canal project, it is to be hoped the republican administration will be fully alive.

In the period of general depression that has prevailed throughout the country during the past three years, probably no section has suffered from it so little as has the Southeast. The enormous development of the cotton-mill industry in this State during the last three years and the good prices brought by the cotton crop last year, together with the good figures at which the bulk of it has been sold this season, have enabled South Carolina to stand the strain of the financial stringency for this long period with almost absolute freedom from commercial disaster. It is said that not since the war has the South Carolina farmer been in as

good condition as he is now. This is consequent upon the diversification of his crops, the growing of his own meat and the enforced practicing of greater economy; in short, the living at home as much as possible. The farmer's prosperity has been reflected upon the merchant, who has been able to collect many debts of long standing, and to readjust his business to something nearer a cash basis. Charleston has come in for a liberal share of this general prosperity; many new enterprises have been started during the past twelve months, amongst the most important of which the following may be mentioned: A knitting mill, with a capital stock of \$50,000, employing fifty persons; a shoe factory, with a capital stock of \$50,000, employing forty persons; an importing and exporting company, with a capital stock of \$100,-000, the chief purpose of which is to develop trade relations with South America, importing coffee and other commodities and exporting the cotton piece goods of this State, so largely used in South American countries; the City Street Railway, a newly-chartered company, is now building fifteen miles of road to be operated by electricity, its tracks covering the principal thoroughfares of the city; a direct steamship line, to have bimonthly sailings, has been established to Liverpool and Manchester, and a weekly line of steamers has been put on by the Clyde Steamship Co. to Boston. The projectors of the Charleston & Macon Railway have again taken up the question of building the road, actual work on which, it is confidently asserted, will soon begin. It may be stated, too, that within the past twelve months as much as \$1,000,000 has been expended in the city in the erection of new buildings and the improving of old ones. Altogether, Charleston has good reason to be satisfied with the winding up of the year 1896, and with what the coming twelve months promise for her. For the South as a whole it is not too sanguine to say that it needs not the ear of prophecy-it needs but the ear of reason to hear the din and bustle of vastly increased commercial and industrial activity that will resound throughout this section in the near future. To fully reap the rich harvest of this renewed activity we have only to be cautious and not hazard too much. We must profit by the experience gained in the speculative fever of the latter eighties, and be quite sure that we do not, like the dog in the fable, lose what we have in attempting what we cannot have.

JOHN A. SMITH, Manager.

Heavy Sales of Pig Iron.

[Special Cor. Manufacturers' Record.]

Birmingham, Ala., January 5. The closing market week of 1896 for iron was extremely dull. The opening week of 1897 was just the reverse, so far as concerned the export trade. The week opened with an order for 10,000 tons for Liverpool, and was followed by other orders from other points, until the grand aggregate made it one of the weeks of heaviest sales to the export trade. For prudential reasons the exact figures are withheld from publication, but the extent of the sales is unquestionable. While on this point, as the statement has been made in the local press, it can be added that the leading interest here has registered on its books export orders approximating 25,000 tons. No more favorable comment could be made on the growth of this trade than this statement carries. Some doubt has been expressed as to the correctness of reports concerning the export trade from Southern districts because official export statistics show movement of much less quantity from ship-

ping ports. But the objectors ignore the fact that most of the orders are for forward delivery and had not appeared at shipping ports at date of compilation of statistics. But a few weeks ago I gave the total export orders since last spring as approximating 60,000 tons. Adding what has been received since then, and we have a grand total of 90,000 tons. Compared to the corresponding period a year back, it is as thousands to tens. The prices obtained are withheld from the public, but it can be stated that it is never less and is often a shade better than is obtainable from the domestic trade.

The report of output, sales, etc., of the

furnaces now absorbs the attention of

parties in interest, and invites only congratulations. The annual sales of the leading interest foot up 636,000 tons. With the exception of three months, the sales of each month in 1896 exceeded the corresponding month in 1895. December, 1896, sales exceeded December, 1895. sales over 30,000 tons, while sales for the last quarter of 1896 exceeded sales for last quarter of 1895, approximately, 100,000 tons. The total sales of 1896 exceeded sales of 1895 by 150,000 tons. Assuming that this report is but a fair criterion of the whole district, it certainly puts to flight all doubt as to the future outcome of the iron industry of this district. If during a season of trying depression sales are so increased and a foreign trade of respectable proportions developed, what will it become when the favoring winds of prosperity give added force to intelligent and persistent effort? To illustrate the improvement in production, the Tennessee Coal & Iron Co. produced from nine furnaces in December 51,000 tons, the largest result in its history. Quotations are \$8.25 for No. 1 foundry, \$7.75 for No. 2 foundry and the softs, \$7.50 for No. 3 foundry, and \$7 for gray forge. There has been some weakness in the quotations of some of the grades, and prices given are not ironclad. and have not been in all cases rigidly maintained. But concessions have been few, and only when a sound discretion directed them in protecting furnace interests. Without exception all the furnace interests are confident of a healthy and increased business this year, and are preparing for it. The Woodward Company will blow in its No. 2 furnace this week, and has resumed operations at its ore and coal mines. The Hardin-Tynes Company leads the minor industries this week in favorable reports, having secured orders for several engines for saw mills, besides other work of magnitude sufficient to increase force to full limit at full time. It is certainly an encouraging feature to record an awakened life in the lumber interests, as indicated by these orders. They have been spoken of as perfectly dead for months past. If they are commencing to show life we can reasonably expect a revival in lines that have not been so hard hit. In fact, there are indications of improvement that point to an ending of the long night of depression that has enveloped the industries of the country. The committee soliciting subscriptions for the print mill bave secured \$150,000 of the \$250,000 asked of this city. The \$100,000 yet to be raised it is now proposed to secure by the issue of bonds, for which it is believed that a continuous favorable outlook will furnish a favorable market. The increased amount asked for was induced by the fact that the operating expense of a large mill was only nominally greater than for the mill originally proposed, and in the interest of economy and safer profits the larger mill was more desirable. It is confidently stated by those on the inside that the enterprise will be

successfully launched.

J. M. K.

RAILROAD NEWS.

[A complete record of all new railroad building in the South will be found in the Construction Department.]

A Good Distinction.

The annual review of the Richmond Dispatch, in referring to the Georgia & Alabama Railroad, says: "This company enjoys the distinction of showing a heavier ratio of increase in business and in earnings in the past twelve months than any other railroad in the United States. The securities of this railway are largely owned in Richmond."

Rapid Construction Work.

The Kansas City, Pittsburg & Gulf Company, it is believed, holds the record for rapid construction work in the South, if not in the whole country. During 1896 it built 207 miles of road complete for operation. This is an average of over two-thirds of a mile per working day. A large part of the work was through a difficult territory for railroad building. The company expects to have the line completed and trains running from Kansas City to Port Arthur by March 1.

A North Carolina Plan.

The plan to build a railroad from Winston-Salem, N. C., to a connection with the Seaboard Air Line system at Monroe is meeting with much favor from the business men of the former place, who have appointed a committee to secure a charter for the proposed road from the next legislature. This line, which has already been described in the Manufacturers' Record, would give the Norfolk & Western a Southern outlet and the Seaboard Air Line an additional Northern outlet.

New Route Across Hampton Roads.

The Norfolk, Willoughby Spit & Old Point Railroad Co, has opened a new route from Norfolk to Old Point by way of its electric line to Willoughby Spit, and thence by ferry to Old Point. By the new service, trips are made nearly every hour, and the fare for the round trip placed at half the present rates. The new line is a great improvement over the service given in the past, and will do much to increase the business relations between the people on the shores of Hampton Roads. Willoughby Spit is situated opposite Old Point, and is an excellent site for a summer resort.

The Montgomery-Columbus Line.

The scheme to construct the line from Montgomery, Ala., to Columbus, Miss., giving the Mobile & Ohio system an entrance into Montgomery, has been approved by the bondholders, also a majority of the stockholders of the company, at meetings held for the purpose. As already stated in the Manufacturers' Record, it is proposed to issue \$4,000,000 in 5 per cent. bonds to finance the undertaking. The new road will use the terminals of the Plant system at Montgomery if satisfactory arrangements can be made. If not, the city council of Montgomery will be asked to give it rights of way on certain city streets.

Fast Southern Freight Service.

A new departure in handling freight from Southern points, giving quick transit from Baltimore, has been established. The plan embraces a joint through freight schedule over the Atlantic Coast Line, South Carolina & Georgia Railroad, Atlanta & West Point Railroad and the Western Railway of Alabama. Under this schedule freight from Baltimore reaches Augusta, Ga., in ninet hours also a York The

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fifty-six and one-half hours; Atlanta, sixty-five hours; Montgomery, Ala., ninety-one hours, and New Orleans, 109 hours. Fast time to a number of other cities is also secured. The new schedule also applies to Providence, Boston, New York, Philadelphia, Pinner's Point, Va., and Richmond.

Two Arkansas Projects.

The people of Hot Springs, Ark., have resumed the agitation in favor of a railroad to the West, and have appointed a committee to co-operate with similar committees in Little Rock and Memphis in securing the construction of such a line. The idea, as already described in the Manufacturers' Record, is to have a connection with the Kansas City, Pittsburg & Gulf system at Mena, Ark.

The plan to extend the Little Rock & Memphis road west from Little Rock, Ark., to a connection with the Choctaw, Oklahoma & Gulf system is meeting with much encouragement in both of the cities named. The Little Rock Board of Trade will make an effort to secure the employment of State convicts on the line, the State to take the railroad bonds in payment. H. L. Brinkley, of Memphis, is actively promoting the project.

Increase of Business on the Baltimore & Ohio.

Oscar G. Murray, one of the receivers of the Baltimore & Ohio Railroad, in an interview with the Manufacturers' Record, says: "The general outlook for business is better than it has been during the past three months. The Baltimore & Ohio Railroad traverses the best part of the country east of the Mississippi river, and any changes and fluctuations in business are speedily noticed. While our business dropped off slightly in November, it has shown an increase in December, which leads me to believe that there is going to be a rather general improvement all along the line. The manufacturing industries are not working on as full time as we expected they would before election, but nevertheless business is in a healthy state, and I feel that the next two or three months will show a very marked improvement."

A Reported Sale.

It is reported that a syndicate of St. Louis parties has secured the Nashville & Knoxville road, and will connect it with the uncompleted Tennessee Central, which the syndicate intends buying at the approaching foreclosure sale. Several days ago the Tennessee Central was inspected by a party of St. Louis people, who are supposed to be the reported purchasers. The Nashville & Knoxville is seventy-nine miles long, extending from Lebanon to Monterey, Tenn., with a branch eight miles long. It would be naturally a part of the Tennessee Central route, which was planned to be constructed between Nashville and Knoxville. Members of the Crawford family, of St. Louis and Terre Haute, Ind., are large stockholders in the company, and A. J. Crawford, of Terre Haute, is president. The Tennessee Central is now controlled by the Niedringhaus brothers, of St. Louis, and it is possible that they are the purchasers of the Nashville & Knoxville.

A Prosperous Company.

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Recent reports of the Atlanta Consolidated Street Railway Co. will attract the attention of investors in street railways. This company controls about fifty-three miles of line; nearly three times as much as all the other electric lines in the city combined. It is one of the largest systems in the South. While it has been kept up to a high standard physically

from its earnings, the reports for three years past show that for the last eight months of 1896 the net earnings were \$136,854.31, and the fixed charges, including taxes, \$84,666.66, leaving net profits of \$52,187.65. In 1894 the net earnings were \$90,934.08. This shows a gain in net earnings in two years of nearly \$50,000, or over 50 per cent., on the business of eight months only. The increase is due to good management in steadily building up the property.

Readers of the Manufacturers' Record will remember that efforts were made several years ago to place the system in a receiver's hands. The management, aided by the stockholders, however, succeeded in defeating the attempt, claiming that the company was able to earn its interest and to defray all obligations. The figures given above show how well this promise is being fulfilled.

St. Louis to Galveston.

According to a dispatch from Galveston, Texas, plans are being prepared for a new railroad system between St. Louis and Galveston. It is stated that Mrs. Hetty Green, the multi-millionaire, is actively interested in the plans, and that her son, E. H. R. Green, president of the Texas Midland road, is carrying out her ideas in forming the combination. As readers of the Manufacturers' Record are aware, the Texas Midland has recently been extended from Ennis to Paris, Texas. At the latter place it connects with the St. Louis & San Francisco, giving it a direct route to St. Louis. Mrs. Green is reported as being the owner of considerable stock in the St. Louis line. By extending the Texas Midland from Ennis to Waco, a distance of about seventy miles, a connection would be made with the Houston & Texas Central and at Houston with the Galveston, La Porte & Houston. The only construction work required would be the building of the section between Ennis and Waco. The system would be one of the most important in the Southwest, being 950 miles long, while it would also form a short route between St. Louis and the Gulf.

President Green, of the Midland; General Manager Yoakum, of the St. Louis & San Francisco, and several officials of the Houston & Texas Central and the Galveston, La Porte & Houston roads recently visited Galveston. It was admitted that the object of the visit was to inspect the La Porte terminals at Galveston.

Fast Time Southward.

Another straw to indicate the importance to which the Gulf ports are attaining is found in a great reduction of running time to be inaugurated between Galveston and St. Louis. The new train will run over the Texas & Pacific, the International & Great Northern and the Iron Mountain, and will make the trip in twenty-eight hours, attaining the greatest rate of speed ever attempted in this route to and from Texas. The reduction will, of course, bring Galveston just that much nearer St. Louis.

Meantime the Texas & Pacific and the Illinois Central are striving to build up New Orleans as a port of entry by seeking the co-operation of some of the transatlantic steamship companies in the establishment of a regular service between this port and the continent, promising, as an inducement, to make such rates as will divert business thither. The Southern Pacific is doing its share for the upbuilding of the Crescent City by arranging for a fast freight service between that port and San Francisco. Twenty hours are to be cut out of the present schedules, half the reduction be-

ing made between El Paso and New Orleans and the other half west of the Texas city. It is confidently expected that much of the freight that now moves across the continent through Chicago and St. Louis will be attracted by this fast service. The business, however, can never be very profitable, for water competition keeps all-rail transcontinental rates very low. At the present time most of the through rates from either the Pacific or the Atlantic are the same as those from the Mississippi river.—St. Louis Globe-Democrat.

Hustling for Deep Water.

The deep-water convention, held a few days since at Fort Smith, Ark., adopted elaborate memorials to Congress asking appropriations for the deepening of the channel from Port Arthur, at the head of Sabine Pass, to the Neches river at the northern extremity of Sabine lake, and also asking for the improvement of the Arkansas river.

The memorial in the interest of Port Arthur called for an appropriation of \$1,000,000 for dredging a channel 120 feet wide and twenty-six feet deep for the distance above indicated. The statement was made that an expenditure of \$2,000,000 by the government has already secured a depth of twenty-five feet through the Pass. One hundred and fifty delegates were present in the hall from Arkansas, Kansas, Oklahoma, Missouri, Colorado and Texas, and there was much enthusiasm manifested with reference to the object of the gathering. This movement in behalf of Port Arthur and Sabine has been largely created by the efforts of Kansas City and the Kansas City, Pittsburg & Gulf Railway. Practical results have already been counted, and it is more than likely that what further government assistance is needed will be secured.

There is a city hundreds of miles from a Gulf port, aided by one railway, that is able to arouse public action in its interest, with every hope of success. And yet a city with over a dozen railways centring in it, and but fifty miles from deep water, with a natural canal from its wharves to the sea, hesitates to take hold of a project that will require but \$500,000, probably, for its completion!

The improvement asked for at Sabine is all right, and the Post has not a word to say against it, but the improvement asked for here at Houston is one in every way of equal, if not greater, importance. The railway systems which extend from Houston westward and northward cover far more territory and serve tens of thousands more people than does the Kansas City road to Port Arthur. If \$1,000,000 should be expended from Port Arthur to the Neches, and it should be, then \$1,000,000 certainly should be expended on the Houston ship channel. The facts are all with us, and what others are successfully doing for other ports can be done as easily by Houston. But others are not sitting by idly and wishing and waiting for something to turn up. This convention at Fort Smith and the activity of Kansas City and the Kansas City, Pittsburg & Gulf Railway show a practical business conception of the requirements of the situation and indicate the way "to get there."-Houston Post.

[What is being done toward the creation of adequate harbor facilities at Port Arthur and attracting attention to that section only illustrates the power of determined effort on the part of one corporation or one city. If the Kansas City, Pittsburg & Gulf Railroad has been able to set the whole country to talking about its territory and the possibilities thereof, it is only because it has determined to attract the world's attention.

and because it has known how to do this. There isn't a railroad system in the South that could not create the same kind of favorable public sentiment if it would only handle the matter properly.—Ed. M. R.]

Railroad Notes.

J. A. Eaves has been appointed soliciting agent for the Louisville & Nashville system at New Orleans.

The fourth division headquarters of the Southern system have been removed from Oakdale to Harriman, Tenn.

Edwin Fitzgerald has been appointed manager of the Asheville Fast Freight Line, with headquarters at Louisville, Ky.

T. E. Brooks has been appointed superintendent of the Nashville, Florence & Sheffield division of the Louisville & Nashville system, succeeding J. O. Ewin.

T. F. Steele has been appointed general freight agent of the Alabama Great Southern division of the Southern system, with headquarters at Birmingham.

Arthur G. Lewis, formerly passenger and ticket agent of the Baltimore & Ohio at Norfolk, has been appointed Southern passenger agent of the same company.

Mr. H. G. Ransburg has been appointed agent of the Adams Express Co. at Balticore, and Edwin R. Glasscock agent for the same company at Louisville, succeeding Mr. Ransburg.

W. H. Hamblen has resigned his position of soliciting agent of the Seaboard Air Line at Chattanooga and returned to the service of the Nashville, Chattanooga & St. Louis in the same capacity.

Reports from Norfolk, Va., are to the effect that exports of cattle are steadily increasing from the ports on Hampton Roads. Nearly 1000 head have been shipped from Norfolk and Newport News within a week.

John J. Archer, general freight and passenger agent of the Ohio River Railroad, announces that J. K. Dye is appointed commercial agent at Chattanooga; Ashby J. Smith, traveling passenger agent, and Jay Archer, soliciting freight agent, with headquarters at Parkersburg, W. Va.

A dispatch from Savannah, Ga., states that the Central of Georgia Company has bought the Middle Georgia & Atlantic road and its branch, the Eatonton line. These roads form a line from Milledgeville to Covington, Ga., sixty-five miles long. It will be operated as a branch of the Central system.

The New Orleans & Western Railroad Co, has begun excavating a canal along the line of its road between Port Chalmette and New Orleans. It is stated that the canal will have an average depth of at least fifteen feet, and will be over 200 feet wide. It is understood that it will be used for transportation purposes.

A New Orleans dispatch announces that still another line of vessels is to begin sailing regularly from that port. The steamships will ply between Calais, France, and New Orleans. They will leave each port monthly. The line, which is to be inaugurated by Louis Danzel & Co., of Cálais and New York, will begin service in March.

A dispatch from Birmingham, Ala., states that the Tennessee Coal, Iron & Railroad Co. has determined to construct a branch of its North Alabama division five miles long to the orebeds in Franklin county, on Hamilton creek. It is reported that the ore will be carried over the new line to the Florence and Sheffield furnaces. Work on the road has already commenced.

TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the Manufacturers' Record. We shall be glad to have such matter at all times, and also to have any general discussion relating to cotton matters.

Another Cotton Mill for South Carolina

The first commission for the new year in South Carolina was issued to the Hamilton Manufacturing Co., of Seneca, S. C., with a capital stock placed at \$25,-000, its purpose being the manufacture of cotton twine, rope and cloth. The incorporators are Messrs. Wm. Lowry, G. W. Gignilliat, W. O. Hamilton and J. W. Stribling. Endeavors will be made at once for the formal organization of the company and the completion of the

The Proposed Warren Mills.

The Warren Manufacturing Co., of which mention was made last week, has formally organized and elected directors and officers at a meeting of the corporators held on January 6. The directors are Messrs. Charles W. Davis, of Graniteville, S. C.; W. B. Smith Whaley, of Columbia, S. C.; George R. Lombard and Charles A. Robbe, of Augusta, Ga., and Arthur S. Wattles, of Canton Junction, Mass. As soon as 20 per cent. of the capital stock is paid in work will be commenced on the buildings, plans and specifications of which are now ready for contractors' bids. The machinery was all contracted for last year. Mr. Whaley, of the company, is the widely known mill engineer of Columbia, and he will have entire charge of the erection of the plant. It is proposed to put in 10,000 spindles at the start, and increase to 24,000 as soon as possible. The plant will be located at Aiken Junction, near Graniteville, S. C.

Big Print-Cloth Mill for South Carolina

The Seneca Manufacturing Co., of Seneca, S. C., which was noted in our last issue as having obtained charter, was formally organized at a meeting of those interested held last week.

Mr. Jacob F. Schirmer, of Seneca, the active promoter of the enterprise, was elected president; S. K. Dendy, Jr., secretary; Mr. Schirmer, treasurer, and the following directors: Messrs. H. S. Chadwick, of Charlotte, N. C.; E. A. Smith, also of Charlotte; John W. Taylor, of Baltimore, Md.; Joseph Bearden, of Oakway, S. C., and J. F. Schirmer.

The company proposes to build a printcloth mill, to be equipped with 20,000 spindles and 650 looms. The building will be three stories high, 103x300 feet, and will be erected as soon as the proper arrangements can be made. Contracts for the machinery have been made. Mr. H. S. Chadwick, the well-known mill engineer of Charlotte, has entire charge of the erection of the plant. The company's capital stock is \$350,000.

The Granby Mill at Columbia Commences Operation.

The Granby Cotton Mill, at Columbia, S. C., was put in operation for the first time on January 1. This is claimed to be one of the most complete and economically constructed mills in the entire South. It was built and equipped after plans of W. B. Smith Whaley & Co., mill engineers of Columbia.

The plant consists of a building four stories high, 371x127 feet, and contain-

ing about four acres of floor space, equipped with 15,000 spindles and 500 looms, which, it is said, will be promptly increased to 53,376 spindles and 1500 looms.

The mill is operated by electric power transmitted about one mile from the Columbia canal, the power being supplied by the Columbia Canal Co., which is building a 10,000 horse-power plant for furnishing power to factories. In this respect it is of very great interest to mill-owners of all sections. The electrical equipment was supplied by the General Electric Co., of New York. The Columbia State, in giving a description of this mill, says:

"The Granby mill will be one of the least costly mills in the South. The cost of construction of the building was only thirty-eight cents per square foot, which is much below the average. When the mill has been entirely filled up with machinery its total cost will not be more than \$13 a spindle."

The ventilating and heating apparatus is driven by two 125 horse-power engines, and the water supply is obtained from a rock-driven well with daily capacity of 250,000 gallons. A 225 horsepower Corliss boiler operates the pumps,

The mill village is composed of fiftyfive two-story cottages, twelve of which have eight rooms each and the remainder six rooms each.

Mr. W. B. Smith Whaley is president of the company, and William Barnwell, secretary-treasurer. The capital stock is

The Compress Question.

New Orleans, La., January 2. Editor Manufacturers' Record:

In your issue of January 1, over the signature of Mr. Thomas P. Grasty, your general Southern correspondent, you give considerable space to the laudation of the "round bale." In order that the true facts in the premises might be furnished to the general public, with the permission of Mr. W. C. Dotterer, general manager of the Union Compress Co., of Little Rock, Ark., I give below a copy of his letter of December 5 last to Mr. D. C. Ball, manager of the "roundbale" system at St. Louis, Mo .:

"My Dear Sir-On my return to the city I find yours of the 3d inst., and had already noticed the article referred to. The great trouble with most of the articles published in regard to heavy loading of compressed cotton is they are misleading to the general public, as they fail to give exact dimensions of car; in fact, I believe the only exception to publications of this nature was with our loading at Newport last season.

"Now, in that article we claim to be in the lead, and having set the pace for the loading of an ordinary 34-foot box car, measurements being as follows: Length, thirty-four feet; width, eight feet three inches; heighth, seven feet five inches-which car contained 115 bales, with a total weight of 60,904 pounds.

"Now, how many round bales did you ever load in car of like dimensions? Mr. Anderson, of round-bale fame, tells us we can beat him. If you never have tried the loading of such a car, why can't you have it done? I will bet you a new hat that you can't beat our record: in other words, if you beat the record we made last season, we will take a similar car this year and break our own record of last year, and in so doing again set the pace, it being understood that the cotton will be pressed at Newport on the Bierce improved hydraulic press. So far as your last article is concerned, I think you very safe in the statement you make, for you well know the railroad people will never give their permission to load

78,000 pounds in one of their 60,000 capacity cars. Why, for that matter, we can make a fine showing with cotton passed through a Morse compress when it comes to loading a 'jumbo forty-footer,' and from what they tell me at Texarkana, the car you recently loaded at Waco was an immense affair, as it passed by the press down there, and our manager rushed out quick as possible to take outside measurements, but the train pulled out before he had time.

"Thanking you for calling my attention to your last article in the Globe-Democrat, I remain, with best wishes."

Kindly give this letter the same publicity that you have given the expressions of opinion of the exponents of the "round bale," much obliging,

Yours very truly,

WM. W. BIERCE.

[The article to which Mr. Bierce refers was an interview with Mr. Jerome Hill, the St. Louis cotton factor, referring to the cylindrical baling system.—Ed. M. R.]

Textile Notes.

A movement is on foot to organize a company to build a cotton mill at Florence, Ala. It is proposed to work up the product of the Cherry Cotton Mills in this

Mr. C. M. Brandon, of the Cherry Cotton Mills, Florence, Ala., and Mr. Jones, also of Florence, Ala., are said to contemplate the lease and operation of the Bluff City Cotton Mills at Memphis,

At a special meeting of the stockholders of the Wadesboro Cotton Mill, of Wadesboro, N. C., it was decided to increase the company's bonded indebtedness by \$40,000. Mr. W. J. McLendon is president.

The enlargement of the Louise Yarn Mills, at Charlotte, N. C., reported last week, will be arranged at once. It is proposed to change and enlarge from a 10,000-spindle hosiery yarn mill to a 15,000-spindle print cloth mill. Mr. H. S. Chadwick is president.

Mr. Jacob Elsas, president of the Fulton Bag and Cotton Mills at Atlanta, Ga., writes us regarding the \$100,000 cotton mill proposed for Hogansville, Ga.: "Negotiations are in progress that will probably lead to the establishment of the enterprise, and a definite announcement regarding it can be expected within a week."

Mr. Robert Collinge, of Paterson, N. J., recently noted as having purchased the Maryland Silk Mills' machinery at Hagerstown, Md., is now arranging for the commencement of operations. Mr. Collinge proposes to remove to Hagerstown his Paterson silk mills, and is now asking for inducements from the Merchants and Manufacturers' Association.

The Fairfield Cotton Mills, at Winnsboro, S. C., is nearly ready for operation. the building being completed, and the machinery will at once be installed. This company was organized last January, placing its capital stock at \$65,000, and payments have been made in weekly dues of fifty cents. Mr. D. A. Tompkins, of Charlotte, N. C., is president of the company, and J. M. Beaty, secretarytreasurer.

A charter has been granted at Jack sonville, Fla., to the American Manufacturing & Commercial Co., with a capital stock of \$50,000. The company is composed of colored men, with the exception of the president and one director, and most of the capital will be furnished by the colored investors. It is the intention to engage in the cultivation of cotton on a tract of land which the company owns near Jaccksonville and erect a mill later on for the manufacture of

cotton rope, using colored operatives, Mr. J. E. T. Bowen is president; R. R. Goode, vice-president; M. J. Christopher. secretary, and Geo. W. Sadler, treasurer.

The completion recently of the Tallassee & Montgomery Railroad from Millstead to Tallassee, in Alabama, has been reported. This line connects Tallassee and Montgomery direct, and will result in extensive enlargements to the mills of the Tallassee Falls Manufacturing Co., of Tallassee, Ala. The company now has a 23,000-spindle plant, and intends to develop its millsite to a plant of 50,000 spindles. Sheetings, shirtings, rope, duck, etc., is the company's product. Mr. John W. Derr is president.

Notwithstanding the severe depression in all industrial operations during the last year, the State of South Carolina made a strong showing in the matter of projected cotton mills. From the report of commissions for charters issued it is seen that sixteen companies are at present under commission and working to secure the capital necessary to the issuance of a charter. The capital represented by these companies is \$1,415,000, while that of the companies which have secured charters and are building their plants, or preparing to do so, is \$1.050,000. These projects were all reported from time to time during the year by the Manufacturers' Record, together with particulars as to location, equipment, etc.

Important Galveston Project.

A dispatch from Galveston, Texas, announces the formation of the Galveston Terminal Co., which intends, it is stated. to buy Pelican Island, on the harbor. This is considered by railroad and other experts to be an excellent site for the erection of wharves, elevators and other railway terminals. During the past year the island was inspected by several parties of railroad officials, including representatives of the Southern Pacific. According to the dispatch, the company, which is capitalized at \$300,000, is to utilize 200 acres of land and to erect the necessary terminal buildings and wharves, the island to be connected with Galveston by a railroad and bridge.

What Winston Is Doing and What It Wants.

Winston, N. C., January 4. Editor Manufacturers' Record:

The Drummond Tobacco Co., office in Philadelphia, claims to want to locate here, and we are in correspondence with them. It is not the Drummond of St. Louis. Our joint meeting of the Chamber of Commerce, Merchants' Board and Tobacco Board of Trade was attended by about 800 business men, and much enthusiasm prevailed. We are going to make some decided improvements here this year. The new \$60,000 courthouse is almost completed, and the prospects for a United States government building are good. The new chair factory is succeeding remarkably well. An addition has been made to the Arista Cotton Mills (F. & H. Fries), and new looms will be put in at once. The South Side Cotton Mill has also made an addition to its building. We have some good kaolin near here, some of which has been shipped to East Liverpool, Ohio, successfully, but the freight rate is high. We want a manufacturer of 'white ware" here. We also want some hardwood manufacturers, a fertilizer factory, a manufacturer of farming implements, a shirt factory, a knitting W. A. BLAIR. mill, etc.

Messrs, Copp & Kern, of Woodstock. Va., manufacturers of improved hames fasteners; are seeking a new and suitable location for their factory.

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AIR.

COTTONSEED OIL.

This department is open for the full and free discussion of trade topics and practical questions, and contributions are invited from men who are identified with this industry. Items of news are always acceptable.

The Market for Cottonseed Products.

New York, N. Y., January 5.

The cotton-oil market presents no new feature, a holiday aspect yet prevailing, if slow trading constitutes such a designation. The continued dullness in lard is undoubtedly the chief drawback to cotton oil, and not a few of the trade look upon the situation with considerable anxiety with regard to the improbability of betterment, at least in the near future. It was expected that something interesting would develop after the turn of the year, but current prices are considered so low by sellers that important stocks are not offered urgently, nor has there been any appreciable enquiry, domestic or foreign. Tallow is the only article having relation to cotton oil which displays evidence of firmness, and at 31/2 cents, the present price, there is encouragement for the soap-maker to purchase the latter, preferably. Lard is weak today, and has been extremely dull at declining prices, the latter not in the least stimulating the demand, while compound lard keeps second place at the price of pure. Chicago options for May lard is 3.921/2 cents, thus keeping up the poor record of the year 1896, as reflected in the light dealings in compound lard. Crude in barrels is nominally quoted at 21 cents, while prime yellow is offered ex dock at 23 cents. Arrivals aggregate 7000 barrels, thus increasing stocks here, exclusive of through shipments. Atlantic States crude oil has sold at 16 cents f. o. b. mills, but 161/2 cents is the selling price in most instances. The demand for crude from Western lard refiners has for the time ceased. Chicago and Kansas City refiners being reported well supplied, having bought crude freely toward the close of the year on a basis of 171/2 cents, chiefly from the Mississippi valley. While production has fallen off in the South, owing to the disinclination of planters to sell seed at current prices, the advantages usually deriving from such an occurrence, with regard to improvement in oil values, is offset by the opposite conditions which prevail in England and France. Cheap Egyptian seed in England has enabled the manufacturers there to offer oil to Southern Europe at prices which practically exclude the American variety. Exports for the week are even less than the preceding one, but at this writing the enquiries from shippers would indicate slightly renewed interest in that phase of the business. Quotations are for crude prime, 20 to 21 cents; loose crude f. o. b. mills, 16 to 181/2 cents; prime summer yellow, 23 cents; off grade summer yellow, 221/2 cents; yellow, butter grades, 25 to 26 cents; prime white, 26 to 27 cents; yellow winter, 30 to 32 cents; white winter, 31 to 33 cents, and soap stock, 1/2 to 1/8c. per pound. The quotations for Liverpool refined in export barrels is still given at 15/9 to 16/3, and for American at 17/6 per hundredweight, all firmly held.

Cake and Meal.-Exports have materially declined, while prices abroad have also receded. A moderate jobbing trade in meal has been done at this market, while an arrival of 450 bags is reported. Consignments of 500 bags of seed is announced via Boston to Liverpool.

Cottonseed-Oil Notes.

The steamship Hazel Branch cleared from New Orleans last week for Rotterdam via Newport News with 200 tons of | 53,601 tons South Carolina.

cottonseed meal and 250 tons of oilcake among her cargo.

The steamship Edenmoor cleared from Galveston last week for Hamburg with 114 sacks of cottonseed oilcake and 52,925 sacks of cottonseed meal.

Mr. J. T. Venable has been appointed manager of the Crescent Oil Mills, of Little Rock, Ark., vice Mr. J. M. Manire, who goes to Memphis as manager of the Crescent of that city.

The Greenville Oil & Cotton Co., of Greenville, Texas, last week filed an amendment to its charter. The amendment authorizes the company to increase its capital stock from \$50,000 to \$100,000.

The Mutual Cotton Oil Co., of Columbus, Ga., at the close of the present season will enlarge its present capacity. The business of the company has been good this season, and the establishment of a refinery is contemplated.

The foreign shipments of cottonseed products from the port of Galveston, Texas, for the four months ending December 31, 1896, were as follows: Cottonseed meal 1,244,485 sacks, cottonseed oilcake 183,579 sacks and cottonseed oil 23,985 barrels.

It is stated that the Velasco Oil Co., of Velasco, Texas, intends at the end of the crushing season to turn its attention to the grinding of castor beans, providing they can be obtained in sufficient quantities. The plant of this company is well equipped with modern machinery, and has appliances for making the finest quality of cottonseed meal.

The following quotations were posted last week by the cottonseed-product department of the Houston Cotton Exchange and Board of Trade: Prime crude loose oil. 16 cents; refined butter oil, nominal: prime summer yellow oil, 181/2 cents: cake and meal f. o. b. mill at interior points, according to location, \$14 to \$15.50; cottonseed hulls, \$3 to \$4 per ton; market easy for oils, and meal and cake steady. Later reports from Texas mills, however, show a decline in prime crude oil, which can now be purchased at 151/2 cents per gallon. The offerings of cottonseed oil are moderate, and buyers show no disposition to bid higher. Meal and cake closes firm, with a good demand at unchanged figures. Very little cottonseed is now being offered for sale by farmers, and most of the mills have secured about all the seed they require for the season.

In New Orleans the market for cottonseed oil is quiet and unchanged. Meal and cake are easier; prime crude oil in bulk, 17 cents; prime summer yellow in barrels, 22 to 221/2 cents; meal and cake, \$16.75 to \$17 per short ton, and \$18.50 per long ton for export. Receivers' prices are quoted as follows: Cottonseed, \$7 per ton of 2000 pounds delivered to the mills; cottonseed meal jobbing at depot, \$16.75 to \$17 per short ton, and \$18.75 to \$19 per long ton for export f. o. prices current at this date: b.; cottonseed oil, 18 to 181/2 cents per gallon for strictly prime crude; in bulk, 16 to 161/2 cents, and 221/2 cents for refined oil at wholesale or for shipment; oilcake, \$18.75 to \$19 per long ton f. o. b.; foots, 1 to 11/4 cents; linters-A, 31/2 to 35/8 cents per pound; B, 31/4 to 31/8 cents; C, 21/2 to 31/2 cents; hulls delivered at 111/2 to 20 cents per 100 pounds, according to location of mills.

The receipts of phosphate rock at the port of Baltimore for the twelve months ending December 31 amounted to 92,421 tons, of which 33,369 tons were Florida, 58,402 tons South Carolina, and samples of Tennessee estimated at 650 tons. The receipts for 1895 were 82,270 tons, of which 27.669 tons were Florida and

PHOSPHATES.

Phosphate Markets.

Office Manufacturers' Record, Baltimore, Md., January 7.

The new year has opened quiet in the local phosphate market, but at the close of the week there is a slightly better demand for fertilizer ingredients, and manufacturers are buying in small quantities. During the past year the receipts of phosphate rock at Baltimore from all points amounted to 92,421 tons, of which 33,369 tons were Florida, 58,402 tons South Carolina, and 650 tons Tennessee rock. Receipts from all points in 1895 amounted to 82,770 tons. The situation at points of production is unchanged, and prospects for a vigorous development not encouraging. In South Carolina the market holds nominally steady, with a fair domestic demand. Shipments of prosphate rock from Charleston, S. C., to domestic ports for the four months ending December 31 amounted to 32,904 tons, against 35,917 tons for the corresponding period in 1895-96. Crude rock at the mines is quoted at \$3, hot-airdried \$3.25 Ashley river and \$3.45 Charleston city. In Florida land-rock miners are only working to supply actual wants and completing old contracts, while in the pebble district work is going on steadily, with shipments of better volume. The shipments of Florida phosphate rock from the following ports for the year 1896 were as follows: Port Tampa 161,258 tons, Fernandina 129,368 tons, Punta Gorda 74,641 tons, Savannah 91,254 tons and Brunswick 40,562 tons, making a total of 497,083 tons. During the past week there were no charters reported in the local market, and in New York the freight market was quiet, with no phosphate business reported.

Fertilizer Ingredients.

The tone of the general market is a shade better, with some increase in inquiry. Sales of high-grade tankage for January were recently made at \$1.65 and 10, ground blood at \$1.70 and azotine at \$1.65 to \$1.70, Baltimore freight, Sulphate of ammonia is firmer; foreign quoted \$2.171/2 to \$2.20 c. i. f. New York and Baltimore to import. Messrs. Thos. II. White & Co., in their circular for December, say: "Ammoniates during the month past have been quiet, and very little new inquiry developed. It has been a buyers' market, and transactions were possible only by acceptance of bids made on persistent solicitation. The main products West, however, having been generally well sold up, there has been no great pressure upon the market. Stocks have measurably increased. Some sales at very low prices have been made at New York and Baltimore, but at the close the market is better, and there is more inquiry.

The following table represents the

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Phosphate and Fertilizer Notes.

The Spartanburg Fertilizer Co., of Spartanburg, S. C., commenced operations last week, and is now turning out some fine samples of ammoniated goods.

The Virginia-Carolina Chemical Co., of Richmond, Va., has declared the regular quarterly dividend of 2 per cent. on the preferred stock of the company. The dividend is payable on the 15th inst.

Messrs. Comer, Hull & Co., the propri-

etors of the Industrial Fertilizer Works at Cordele, Ga., are preparing to enlarge their mill to nearly twice its present size. It is stated that the sales of this company are larger than usual this season.

The Brunswick Terminal Co., of Brunswick, Ga., reports the shipments of phosphate rock from that port for the month of December, 1896, at 3056 tons, distributed as follows: Steamship Saint Enoch for Liverpool with 1391 tons, and steamship Saint Regulus for Garston with 1665 tons.

The shipments of phosphate rock from the port of Fernandina for the month of December, 1896, were as follows: Schooner Henry P. Mason for Elizabeth, N. J., with 950 tons, by the Dunnellon Phosphate Co., and steamship Illiria for Genoa with 1912 tons, by A. Newman: total, 2862 tons.

The British steamship Strathnairn cleared last week from Savannah, Ga., for Bremen, having 478 tons of Florida phosphate rock among her cargo, valued at \$4870, and the steamship Kingswood for Genoa and St. Louis de Rhone with 1100 tons of phosphate among her cargo for the latter port.

Mr. J. J. Lane, of Newberry, S. C., has arranged to send his first shipment of fertilizers to Newberry from Charleston on the 10th inst. He has chartered from the Atlantic Coast Line a special train, consisting of twenty-two cars. Mr. Lane is said to be the heaviest single fertilizer shipper from Charleston.

Among the clearances of phosphate rock from Charleston, S. C., last week the following vessels were reported: Schooners Vanleer Black for Baltimore with 940 tons; Emma C. Knowles for Philadelphia with 800 tons, and J. W. Belano for Boothbay with 850 tons. The total shipments of phosphate rock from September 1, 1896, to January 1, inclusive, were 32,904 tons domestic and 1300 tons foreign, making a total of 34,204 tons, against 36,017 tons for the corresponding period in 1895-96.

The Charlotte Harbor Lighterage & Stevedore Co. reports the phosphate shipments from the port of Punta Gorda for the month of December, 1896, were as follows: Schooners J. W. Linnell with 1355 tons and the Jacob S. Winslow with 1383 tons, both for Wilmington, N. C.; schooners Nellie W. Howlett with 800 tons and Mary Lee Patton with 815 tons, both for Richmond, Va.; schooner Haroldine for Baltimore with 1873 tons: schooner Roland Sanford for Mobile with 122 tons, and schooner Carrie A. Lane for Richmond, Va., and Norfolk with 1200 tons-total 7548 tons-all by the Peace River Phosphate Mining Co.

The shipments of phosphate rock from Port Tampa, Fla., during the month of December, 1896, amounted to 15,694 tons, of which 9407 tons were domestic and 6287 foreign, distributed as follows: Schooners Isaiah Hart 1260 tons pebble, Major Pickands 1553 tons pebble, Horace Macomber 1512 tons pebble, E. J. Berwind 1617 tons pebble, all for Baltimore, by the Palmetto Phosphate Co.; steamship Crown for Helsingborg 706 tons rock, by Land Pebble Phosphate Co.; steamship Virginia for Landskrona 3017 tons rock and 1448 tons rock for Gothenburg, by Florida Phosphate Co.; oner Ahra 939 tons pebble for Man tua creek, by Bone Valley Phosphate Co.; schooner Clara Randall for Norfolk and Richmond 1522 tons pebble, by Bone Valley Phosphate Co.; schooner J. B. Coyle 1004 tons pebble for Philadelphia, by Bone Hill Consolidated Co., and bark Alviva for Ghent with 1116 tons, by Buttgenbach & Co.-making a total of 15,694 tons.

LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

LUMBER MARKET REVIEWS.

Office Manufacturers' Record, Baltimore, Md., January 7.

The week under review has developed nothing new in the local lumber market, and conditions have not materially changed with the opening of the new year. Among local buyers there is very little disposition to increase stocks, and yardmen, boxmakers and other buyers are only purchasing to supply immediate necessities. Receipts of lumber last week were light, and at the moment stocks are fully ample for the slow demand existing. In yellow pine, air-dried material is about steady as to price, while kiln-dried North Carolina pine is a shade firmer, with a better inquiry from out-of-town buyers. White pine is also showing a firmer front, and there is more inquiry than usual. Cypress is dull, with prices steady. Among hardwood men the volume of business is reported very light in a local way, while from out-of-town buyers comes a bette: demand. The export trade is picking up, and several large orders have been received from Europe during the past week. Shippers experience very little inconvenience at present in getting vessels, and consignments go forward more promptly. Among local woodworking concerns there is very little doing. Planing mills are not overworked, while boxmakers and others are only running to supply nearby contracts.

The following list represents the prices current at this date:

[The quotations for yellow pine are for cargo lots, and for all hardwoods the figures indicate values for choice car lots.] long Large joists, 3—16 long and up Scantling, 2x3, 2x4 and 3x4... CYPRESS. 20 50@ 21 50 14 50@ 15 50 10 50@ 11 50 8 50@ 9 50 8 00@ 17 00 12 00@ 13 00 28 50@ 30 50 31 00@ 32 00 4x6, No. 2. -4x6, 16 feet, fencing. -4x6, rough. 30 00@ 34 00 White pine....

Charleston.

[From our own Correspondent.] Charleston, S. C., January 5.

in nearly every branch of the lumber industry in this section during the current month, and the outlook for a general improvement during the spring months is somewhat encouraging. The demand during the month of December was only moderate, but during the past week there has been a good inquiry for lumber and other wood products. Prices for all classes of lumber are very steady, and there is also a good trade in crossties and shingles. At all milling sections adjacent to this city there is considerable activity, and mills are generally well supplied with orders. At Georgetown the lumber business is unusually brisk, and mills are all running at their full capacity in order to fill contracts. At the close of business on Saturday last prices for lumber were firmer, and quotations were recorded as follows: Merchantable lumber, \$14 to \$16 for city-sawed, \$12 to \$14 for railroad: square and sound, \$9 to \$13 for railroad, \$8 to \$11 for raft; dock timber, \$4.50 to \$6.50; shipping, \$8.50 to \$10.50. There is a fair demand for shingles, and the market is firm at \$5 to \$7 per thousand. The business of the year just closed, while only moderate in volume, was characterized by considerable activity at times, and orders received have met with prompt attention. Manufacturers are disposed to look on the situation in lumber as presenting a better volume of business for the current year, with a prospect of an appreciation in values. The local building demand is better, and contractors and others are going to enjoy a better trade during the spring and summer months. During the past week the following shipments of lumber were reported: Schooner Maggie M. Keough with 500,000 feet of lumber; schooner Bessie Whiting with 70,000 feet, and schooner Nelson E. Newberry with 540,000 feet. The total shipments of lumber from this port from September 1 to January 1, 1897, amounted to 20,005,178 feet to domestic ports and 498,000 feet foreign, making a total of 20,503,178 feet, against 24,858,-664 feet for the corresponding period last year. Lumber freights continue steady, with a moderate offering of desirable tonnage, and rates firm at quotations, \$4.38 to \$4.50, and ties 14 to 141/2 cents each. Dry lumber to Providence is quoted at \$4.50.

[From our own Correspondent.]

Savannah, Ga., January 4. It is yet too early in the year to speculate much on the tone of the lumber market, as at this period of the season there is very little doing except closing the business of the old year. There is, however, considerable activity already among lumbermen, and many engaged in the trade predict a very prosperous year. The tariff question is occupying the attention of manufacturers, and they all hope for a restoration of the tariff of \$2 per 1000 feet on lumber. The reports from all milling sections in this State are generally favorable and show considerable activity among mills. There is a good demand for lumber and stocks are generally light, while prices are firm, with a tendency to advance. At Darien, Cordele, Brunswick and other points the lumber trade is reported very active, with shipments good. On Saturday the market closed with prices as follows: Ordinary sizes, \$11 to \$12; difficult sizes, \$12 to \$13; flooring boards, \$15 to \$22; shipstuff, \$16.50 to \$20, and crossties, \$10. The following shipments are reported during the week: For New York, schooner City of Jacksonville with 256,575 feet of pitch-pine lumber; schooner Joel Cook with 313,170 feet; schooner Horace G. Morse with 347,567 feet; schooner Emma A fair volume of business is expected C. Middleton for Wilmington, Del., and

Philadelphia with 315,102 feet; schooner John R. Penrose with 48,577 feet of lumber and 7376 crossties, measuring 329,154 feet, and schooner Charles M. Patterson with 187,467 feet of lumber and 8941 crossties, measuring 398,992 feet, both for Philadelphia. New York steamers took out 55,000 feet of lumber, Philadelphia steamers 22,500 feet, and Baltimore boats 33,717 feet. The British steamer Garlands cleared for Barcelona with 24, 204 oak staves among her cargo. Lumber freights are steady, and rates from this and nearby ports in Georgia are quoted at \$4 to \$4.50 for a range including Baltimore and Portland, Maine; railroad ties, basis forty-four feet, 16 cents. Among the charters reported in New York last week were the following: Brig Irene, 457 tons, from Brunswick to New York with lumber at \$4.371/2; a British schooner, 199 tons, from Brunswick to Martinique with lumber at \$5.75; schooners Eva B. Hall, 405 tons, and St. Croix, 191 tons, from Fernandina to New York with ties at 15 cents; schooner James A. Garfield, 485 tons, from Brunswick to New York at \$4.371/2, and Anna D. Lamson, 426 tons, from Brunswick to Philadelphia with lumber at \$4.25, and schooner M. A. Willey, 372 tons, from Brunswick to New York with lumber at \$4.371/2.

Brunswick.

[From our own Correspondent.] Brunswick, Ga., January 4.

At no other period in the history of this port has the commercial and industrial outlook been more encouraging than at the present. The general business of the past year has been characterized by indomitable energy and spirited enterprise on the part of its citizens, while through the united efforts of its commercial men the business of the port has shown a remarkable increase. The timber and lumber trade is now showing a very satisfactory front, and for the present year the volume of business bids fair to be greater that last. Lumbermen here are in touch with all the prominent domestic markets, and their foreign connections are at present very amicable. Spain has been a good customer during 1896; South and Central America and the United Kingdom have also been liberal purchasers. At the moment there is great activity among the saw mills here and at adjacent points, and nearly all have orders which will keep them going for several months to come. There is a much better feeling among manufacturers, and prices show a somewhat better margin of profit. The various grades of lumber for the different markets cannot be excelled for finish and general appearance, and prices for all desirable stuff is much firmer in tone. A carefully-prepared yearly report of the lumber and timber trade is given in the Times, of this city, on the 1st inst., which is as follows: Lumber exported during 1896 amounted to 115,-004,000 feet and timber 3,568,000 feet. making a total of 118,572,000 feet, against 94,299,000 feet during the year 1895. The crosstie industry has shown remarkable activity during the past year, the demand having been steady, with prices showing a better margin of profit. The total shipments of crossties for the year amounted to 1,026,078, the last quarter of the year showing the largest shipments. In shingles there has been a fair trade in progress, and prices have generally been steady, with a spirited demand, the total amount of shipments for the year being 7.779.750. Lumber freights are firm at the moment, and there are a number of vessels offering for domestic and foreign trade. The brig Irene, 467 tons, was chartered in New York last week to load lumber here for

schooner, 199 tons, to load lumber for Martinique at \$5.75.

Jacksonville.

[From our own Correspondent.] Jacksonville, Fla., January 4.

The record of the year 1896 shows the volume of business at this port much larger than the previous year. The lumber interests especially are now showing a great improvement over past years, and the increase of shipments has been steady. The annual report of the collector of customs for this port shows that during the year 1896 the total number of vessels entering port was 369, of which 141 were steamers and 228 sailing vessels. The total tonnage of these vessels was 375,511. The total number of vessels clearing was 372, of which 327 were for coastwise ports and forty-five for foreign ports. The shipments of lumber and its products were divided as follows: Yellow pine, coastwise, 89,822,945 feet; yellow pine, foreign, 5,663,334 feet; cypress, coastwise, 6,252,600 feet, making a total of 101,738,879 feet. The total coastwise shipments of yellow-pine lumber and cypress in 1895 was 79,239,466. against 95,120,926 during 1896, an increase of nearly 16,000,000 feet. Other constwise shipments of wood products in 1896 were 67,210,200 shingles and 268,-728 crossties. Foreign shipments of shingles were 264,156, and of shooks 16,309. The various saw-mill plants both here and at Palatka are now all operating on full time, and the outlook for future business is rather more encouraging. The lumber manufactured here is of the best quality and finish, and all desirable grades and dimensions are in good demand, with prices firm and tending higher. The offering of tonnage during the year has been moderate, and vessels of a proper size have been scarce, with rates of freight steady. The establishment during the year of a line of steamers to Boston by the Clyde Line is among the important records of the year. The real-estate business has also shown considerable activity, and a large number of new buildings have been erected during the year. Among the vessels clearing since the 1st inst. were the following: Steamship Morgan City for Boston with 10,000 feet of lumber; steamship Algonquin with 400,000 feet of lumber, 3000 crossties, 100,000 shingles and other cargo, and the steamship Iroquois with 250,000 feet of lumber and 2000 bundles of shingles, both for New York.

Mobile.

[From our own Correspondent.] Mobile, Ala., January 4.

There is every indication that the present year will be one of great prosperity in the general trade of this port. In the lumber and timber industry especially the outlook is very promising, and with the establishment of additional lines of steamers to foreign ports and the construction of the Mobile, Jackson & Kansas City Railroad, new markets will be created for material. At this writing the timber market is already showing a firm tone, and in lumber the situation is characterized by a better demand, with values tending upward. There is also an improvement in the shingle trade, which during the past year has been only moderately active. The demand is unusually active, and the mills are all busy, while stocks are generally light and timber continues scarce. During the past week several Cuban shipments of lumber have been made, and the new steamship line to Hayti is now fully organized, a cargo of 300,000 feet going out recently to that republic. Among the clearances last week were the following vessels: Schooner Bartholdi with 114,320 feet of New York at \$4.371/2, and a British lumber and schooner Bonniform with 92,000 feet, both for Cuba. The schooner Georgiana cleared for Grand Cayman with 22,000 feet of lumber. The total shipments of lumber from this port from September 1, 1896, to January 1, inclusive, amounts to 22,531,836 feet, against 21,328,271 feet for the corresponding period last year. In hewn timber the shipments for the same period aggregate 121,988 cubic feet, against 302,713 cubic feet last year, and in sawn timber the figures recorded are 1,554,270 cubic feet, against 1,148,723 cubic feet in 1895-96. The various mills in Mississippi and Alabama adjacent to this city report great activity, and nearly all are running at their full capacity, being well supplied with orders for the home and export trade. It is stated that the fine plant of the Seaboard Manufacturing Co., at Fairford, will soon be put in operation, as preparations are now being made towards that end. At Pensacola, Fla., the market is rather quiet at the moment, but during the month considerable business is expected, as the demand for both lumber and timber is increasing, and a large export trade will be done. The exports for the month of December, 1896, not including coastwise shipments, amounted to \$1,109,535 in value. During the past week the exports of hewn and sawn timber amounted to over 4,000,000 superficial feet, and of lumber 2,670,000 feet. Among the charters reported last week in New York were the following: A Norwegian bark, 1200 tons, from Pensacola to Rio Janeiro with lumber on private terms; a schooner, 273 tons, from Crandal, Fla., to Trinidad with lumber at \$5.75; schooner Ebenezer Haggett from Apalachicola to New York with lumber at \$5.25; a British schooner, 321 tons, from Moss Point to Havana with lumber at or about \$5.50; schooner Samuel Egerton from Mobile to Honduras with lumber, lump sum, and the British steamer Drumfell, 1568 tons, from Pensacola to Bristol channel with sawn timber at 100/, March-April. The steamer Royalist cleared last week from Mobile for Liverpool with 55 tons of mahogany among her cargo.

Beaumont.

Beaumont, Texas, January 2. A better feeling prevails in lumber circles than has existed for the past two or three years. The past month has been a busy one for all the mills in this section, and the books of the freight office show that the shipments for December have been greater in 1896 than for the same month for the past five years, and exceed the shipments of December, 1895, by 340 cars. Rail shipments for the month foot up 1684 cars, while the total for the year is 15,038, as compared with 17,268 cars in 1895. A general lethargy seems to have been stealing over the lumber trade for the past few years. In 1892 the rail shipments from here were 19,084 cars. Since then the shipments have been decreasing each year, and a steady decline in prices has been noted for the past few years, which has forced millmen to acknowledge that all is vanity and vexation in the lumber world. The tide seems now to have turned again and set to flood. Prices have been advancing of late, notwithstanding a steady increment in demand has been the concomitant.

It is for these reasons that the hopes of the millmen have resurged, and that the predictions for the coming year are so optimistic.

All of the mills in this city, and, in fact, in the Sabine district, enter the new year with good lists of orders, and in most cases the yard stocks have been greatly reduced.

The most prominent and satisfactory

port trade, which has developed astonishingly the past year. A year ago three vessels of light capacity was a goodly number in port; today there are fifteen. The total shipments from Sabine Pass for the past year amount to about 29,000,000 feet, of which over 23,000,000 feet were for foreign ports and the balance for other coast ports. The increase of exports for 1896 was about 8,000,000 feet over the shipments for 1895, and the growth for 1897 is predicted to be far in excess of what it has been for the past year.

The Kansas City, Pittsburg & Gulf Railroad will soon be completed, opening up additional lumberfields with easy access to the deep water at Sabine Pass, and with the present encouragement of trade we may soon expect to hear of new mills along its line. The withdrawal of coast mills to the export trade has a salutary effect upon the interior trade, and this branch will be more affected the present year on account of the larger number of mills in this section confining their attention to the export business, which has been the only paying branch of the lumber trade in this section for the past two years, when yard stocks have been offered in the interior at cost, and in many cases far below actual cost. Let it not, however, be thought that prices are now on a satisfactory basis, although improved. An indication of the condition may be obtained from a recent open letter of Lutcher & Moore in reply to Commissioner Rose and his charge that a gigantic lumber trust exists among the mills of the State. The relations of the mills are well set forth by the statement contained therein, that "the consumers of Texas probably take less than one-third of our output, principally because the foreign markets offer better prices." The company has made the commissioner or "any combination of consumers" a standing offer for thirty days of all its yard stock at "actual cost, to be arrived at by examination of the company's books," the only condition being cash or satisfactory security. Lutcher & Moore are one of the largest mills in this section, and in common with the other mills recognize the fact that prices for the past year or two have allowed no margin to the manufacturer, and in many cases sales have been made below cost of production in order to meet maturing obligations.

It is rumored that Kountz Bros., bankers, are figuring a deal with the Gulf, Beaumont & Kansas City Railroad to extend the line, giving connection with the Santa Fe and Cotton Belt systems and forming an outlet to Sabine Pass. The business of the "Kaysee" road has been rapidly increasing the past few months, and in order to meet the demands of traffic the road has ordered several more locomotives and cars. It is expected that work will soon be begun on a junction of the "Kaysee" with the Texas, Louisiana & Eastern, as it is reported on good authority that contracts are being W. F. F. let for the connection.

Lumber Notes.

The Wellsboro Manufacturing & Building Co., Limited, Wellsboro, Pa., is in the market for bill of pine lumber.

The saw mill of Samuel Bacon & Son, at Winthrop, near New Berne, N. C., which was destroyed by fire last summer, is being rebuilt.

The furniture factory of Myers & Voss, of Louisville, Ky., was destroyed by fire on the 31st ult. The loss is estimated at \$7000, with a full insurance.

and Adele Ball via Port Royal for New York.

The furniture company recently organized and soon to be incorporated at Shreveport, La., intends erecting a factory building, a warehouse and paint

The Beebe Stave Works, at Little Rock, Ark., is undergoing extensive improvements. A new brick boiler-room is being erected and a new boiler being

The White River Stave Co., at Clarendon, Ark., is building a factory, dry-kiln and power-house and putting in a complete equipment for the manufacture of

The Big Creek Lumber Co., at Pollock, La., has closed down for about three weeks. There will be a general overhauling of machinery, in order to be ready to start up with full crews.

Bumgarner & Conkle's bent-wood works and lumber yards at Junction City, Ohio, were destroyed by fire on the 29th ult. The loss is estimated at \$50,-000, with an insurance of \$6000.

It is stated that during the present year the Jessie Thompson lumber mills, at Augusta, Ga., will be rebuilt. The splendid saw-mill plant of this company was destroyed by fire in October, 1895.

The Howison-Rogers Lumber Co., of Howison, Miss., is building a new saw mill at that place. Mr. D. W. Rogers is well known through his connection with the Alabama Lumber Co., Limited.

The foreign exports of lumber from Baltimore for the year 1896 aggregated 45,253,000 feet, against 25,821,000 feet for 1895. The foreign exports of logs for 1896 were valued at \$505,910, against \$383,908 for 1895.

The close of the year 1896 records twenty-one large vessels at Sabine Pass, Texas, in the lumber service. They will take out 8,000,000 feet, representing nearly \$800,000 to the milling interests of Southwest Texas.

The furniture establishment of Mr. Walter Scott, at Richmond, Va., was destroyed by fire on the 1st inst. Mr. Scott's loss is variously estimated at from \$15,000 to \$20,000, with insurance amounting to \$24,800

The Nebraska Lumber Co., at Doucette, Texas, began work last week putting in sizer, edger, molding machines, etc. The mill of this company will have a capacity for manufacturing fine lumber equal to any in that section.

It is said that the Seaboard Manufacturing Co.'s plant at Fairford, Ala., will soon be put in operation again. Major S. T. Prince is now the agent of the bondholders, and has charge of the property until they commence to manufacture

The factory of the Benjamin Butter Dish Manufacturing Co., at River View, five miles north of Chattanooga, Tenn., was burned on the 1st inst. The loss will approximate \$14,000, with \$6000 insurance. The plant was completed only a short time ago.

The large furniture house of Julius Lansburg, at Washington, D. C., was destroyed by fire last week. The loss on building, stock and adjacent structures damaged will amount to about \$200,000. The loss on stock alone is placed at \$100,-000, on which there is \$60,000 insurance.

Mr. William H. Parrish, treasurer of the Richmond Cedar Works, at Richmond, Va., visited Corsicana, Texas, last week for the purpose of looking after a Among the vessels at Fernandina last suitable location to establish a branch as the general outlook for improvement, week loading with lumber were the factory in that city for the manufacture are encouraging." The committee on schooners Julia A. Warr for Fall River, of woodenware. As that section of counfactor of the lumber business is the ex- Joseph W. Hawthorne for New York, try abounds in first-class cedar and other report, but it is stated that no changes

woods suitable for the purposes of the company, it is the intention to move its branch establishment now in operation in South Alabama to Corsicana.

Articles were filed in Little Rock, Ark., last week incorporating the Knobel Lumber Co. The company's place of business will be located at Black river No. 2, Clay county, Arkansas. A. Michener. Frank Ross and W. M. Better are the incorporators. The capital stock is placed

Messrs. Scatcherd & Son, of Memphis, Tenn., shipped last week to J. T. Williams & Son, of New York city, 300,000 feet of quarter-sawed oak of the finest quality. This is considered one of the largest shipments of that class of lumber ever sent to one consignee by a single consignor.

The American Timber Export Co. received its charter last week. The company will deal in lumber, timber, logs, etc. The capital stock is \$10,000, and the headquarters of the company will be Alexandria, Va. Mr. R. G. Park, of Westchester, Pa., is president, and Mr. James S. Beach, local agent.

The car shipments of lumber from Orange, Texas, during 1896 were as follows: January 609, February March 540, April 651, May 455, June 458, July 539, August 485, September 332, October 417, November 516 and December 613, making a total of 6029 cars, against 8815 cars in 1895 and 5404 cars in 1894.

A charter was granted in Alexandria. Va., last week to the E. E. Jackson Co., whose purpose it is to deal in lumber, etc. The capital stock is placed at \$150,000. E. E. Jackson, of Salisbury, Md., is president; James L. Cropper, of Alexandria, Va., vice-president, and Noah H. Rider, of Washington, D. C., secretary and

The steamship Comanche, of the Clyde Line, cleared from Jacksonville, Fla., on the 2d for New York with 260,000 feet of lumber, 3100 bundles of shingles and 4700 crossties, with other merchandise. The schooner Luther T. Garretson cleared from the same port for New York on the 3d with 250,000 cypress shingles from the Wilson Cypress Co., and 174,000 feet of cypress lumber and 93,000 feet of yellow-pine lumber from Cashen's mills; the schooner J. B. Holden, also for New York, with 320,000 feet of yellow-pine lumber.

The hearing before the ways and means committee at Washington, D. C., on the 31st ult. covered wood and manufactures of wood. Mr. C. M. Goodyear, of Buffalo, representative of committee, and others appointed by the lumbermen's convention held in Cincinnati, appeared with a petition of the committee asking protection for the lumber trade. He said that 3,000,000 of our population are dependent on this industry, and asked practically the restoration of the duty of 1893; that is, that in which pine and all other hard lumbers were placed in the \$1 class by the act of 1890 be restored to the \$2 class.

The annual meeting of the stockholders of the Mechanics, Dealers and Lumbermen's Exchange of New Orleans was held in that city last week. President B. M. Harrod presided, with Secretary Dirmeyer at the desk. All the various committees made interesting reports. The principal question discussed was that of membership. "The quotations committee reported a slight decline in prices, with a dull year. The export trade and contracting business, as well classification and measurement made no

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feet of m with have been made in the classification books. The board of directors in their report invoked the earnest consideration of all its members to the condition of the affairs of the Exchange.

A Want Easily Supplied.

F. R. Hewitt, Hewitt, N. C., wants a few attractive calendars.

A Good Way to Begin.

The city of Winston-Salem, N. C., has determined to begin the new year by taking steps to develop its business and manufacturing interests by systematic effort. The Chamber of Commerce, Merchants and Traders' Union and Tobacco Board of Trade have united in the movement, and have already held one public meeting for the purpose of arousing citizens generally to the importance of the matter. Winston is one of the leading tobacco-manufacturing cities of the South. From a long experience its people appreciate the benefits that come from the operation of factories, and are not content to rest where they are, but intend to secure more if possible.

Machinery for Japan.

As often predicted by the Manufacturers' Record, an important trade is now being developed by American machinery manufacturers with Japan. Some details given in a recent issue of the New York Journal of Commerce, after referring to the orders placed last year by Japan with the Illinois Steel Co. for 10,000 tons of steel rails and with the Carnegie Co. for 9000 tons, show that the Rogers Locomotive Works have received a contract for eighteen locomotives for the Japanese government, and the Baldwin Locomotive Works an order for forty from the Nippon Railway Co., of Japan. The Journal also says:

"The firm of Mitsui & Co., of Japan, which opened offices in this city some months ago, has devoted considerable attention to contracts for railway supplies and machinery, and reports several gratifying orders in their lines. Kenzo Iwahara, who represents the company in this city, when questioned recently in regard to the opportunities of American manufacturers of railway equipment in Japanese markets, said: 'Until about a year ago our railroads confined their orders almost exclusively to European houses, but since then American firms have gained a foothold in Japan, and I think there is every reason to believe that they will in the future secure a fair share of the business.'

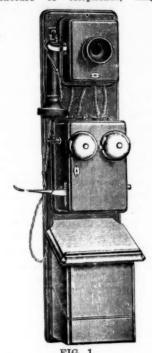
"A representative of a leading firm in this city doing business with China and Japan, when questioned concerning the order for locomotives reported to have been placed with the Baldwin Works, said: 'We are not surprised that the Nippon road is ordering largely from this country. It is the largest railroad in Japan. It runs from Tokio to Awomori, the most northerly port in Japan. You will probably hear of some other goodsized orders for locomotives and other railroad material for Japan being placed soon. We are one of the many firms who are sending quantities of this class of material to Japan. We are about to ask for bids on locomotives and other things that we will require for railroads.'

"In addition to orders for railway supplies, several contracts have been placed in this country within a comparatively recent date for paper-making machinery. It is understood that three large plants have been ordered here, the aggregate value of which is estimated at from \$250,000 to \$300,000. There has also been a good demand for mining and electrical machinery."

MECHANICAL.

Improved Telephones.

In the accompanying illustration a view is given of a telephone possessing many improvements that increase its utility and the comfort of the operator. A cut is also shown of a unique portable telephone outfit which has many uses. They are the products of the Viaduct Manufacturing Co., of Baltimore. A quarter of a century's experience in the manufacture of telephones, magneto



bells, call boxes and supplies enables this concern to produce a high grade of goods. This company can now make the auto-

matic switch, as the Watson patent, No. 270,522, is no longer in force, owing to a Canadian patent of similar purport having expired.

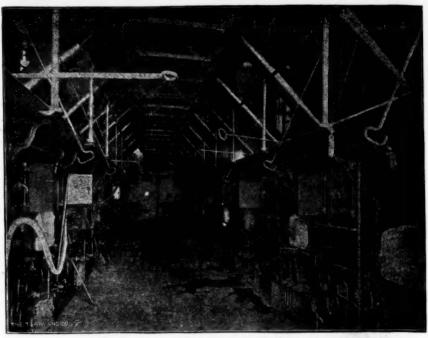
The company states that it is enabled to furnish the automatic hook, or receiver holder, the same as is used by the American Bell Telephone Co., with a non-infringing magneto bell. It can now also use the microphone, or battery connections, identically the same as in the magneto bells furnished prior to July, 1895,

arrangement, it is claimed, accomplishes this important function; prevents the transmitter and receiver burning out by lightning or other heavy electric currents; does not infringe any existing patents; leaves the bell out of circuit when conversing, and the receiver out of circuit when the arm is removed: its patented hinge is an important feature, as it is pointed out that in these apparently small items success or failure is made in operating a telephone system.

The portable telephone outfit consists

Its predecessor was licensed manufacturer of the American Bell Telephone Co. early in the history of the telephone, and contributed largely to the success of the telephone by its success in producing as perfect a signal bell as could be made. It still has the same expert mechanics in its employ.

The company has reconstructed its extensive works at the Relay, B. & O. R. R., which were completely destroyed by fire in June, 1894, upon an enlarged scale. Each department has its own of this company's extra standard 18,000 special building, all being on the ground

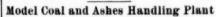


A MODEL COAL AND ASHES HANDLING PLANT.

ohm, generator and ringer, hard rubber watch-case receiver and cord, a firstclass transmitter, one cell of dry battery. All of these are enclosed in a polished oak case-dimensions, 10x6x4 inches, weight, fourteen pounds, with a substantial strap to carry it by. For railroad or trolley purposes, or for general testing, this outfit has proven a success. It is believed to be a valuable adjunct to a conductor's kit on both steam and electric roads.

Linemen and inspectors for cable box testing see the necessity of such an outfit. When desired, a spring jack switch can

floor, and filled with the latest and most approved machinery. It manufactures its own woodwork, as well as everything pertaining to the outfit, except a battery transmitter; the most approved pattern of this will be furnished through another party when desired.



The equipment of power plants is a subject of great interest to all power users. The following description of a complete Jeffrey coal and ashes handling equipment, as installed at the modern plant of the Cicero & Proviso Street Railway Co. plant, Chicago, Ill., will therefore be of much interest.

The illustration, which is only one of a number taken at this plant, clearly shows the boiler fronts, with the overhead coalstorage bunkers, from which the coal is fed on to the stokers. In explanation it may be stated that the wagons deliver the coal, either slack or lump, to chutes terminating over a double-strung flight conveyor, which conveys the coal to a tooth-crusher (if lump coal is used) to crush it to size. From this it is spouted to a bucket elevator, which raises and delivers it to either one of two spouts, one spout terminating over the upper trough of the initial conveyor, this conveyor carrying the coal to the storage bin, the other spout terminating over the crossangle conveyor.

This angle conveyor delivers the coal to a longitudinal conveyor, over the coal bunkers, gates being provided in the trough at points suitable to enable filling the bunkers. From these bunkers coal is spouted to the mechanical stokers, as shown in the illustration.

The ashes-handling outfit is located in the basement, and consists of two 12inch cast-iron spiral conveyors, These conveyors receive the ashes directly from the grate bins under the boilers and deliver them to the cross-conveyor. From there they are taken by a continuous bucket elevator and spouted to an ashes receiving tank on the outside of the

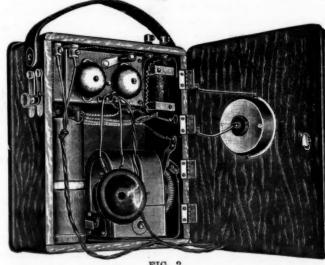


FIG. 2.

without using the crotch upon the trans- accompany it, at a small additional cost, except where a ratchet transmitter is

The cuts herewith represent the company's latest standard telephone, including the arm-rest switch, covered by three patents owned by this company. The advantages of this are explained as follows: Rests the arm while conversing, which users of telephones appreciate the more they use it; prevents the bell from being left out of circuit after use and thereby losing calls, when the receiver is accidentally left off the hook; no other with one exception.

mitter, which is considered unnecessary, by which the main wires can be attached and the outfit placed on a table or chair at the bedside, or on a desk, so that the user may not be disturbed to rise from bed or chair to communicate.

This company claims to be the largest manufacturer of telephones, magneto bells and district telegraph messenger boxes and supplies in the country, having been continuously making them-the former since 1878, the latter since 1871-a quarter of a century, and has made more than all the other manufacturers combined, building depend clutche is furn cated i This lumbus for des

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building. Each part of the system is independently controlled by friction clutches. Power for the whole system is furnished by an automatic engine located in the basement.

This plant was designed and installed by the Jeffrey Manufacturing Co., Columbus, Ohio, whose superior facilities for designing and constructing this class of work are well known.

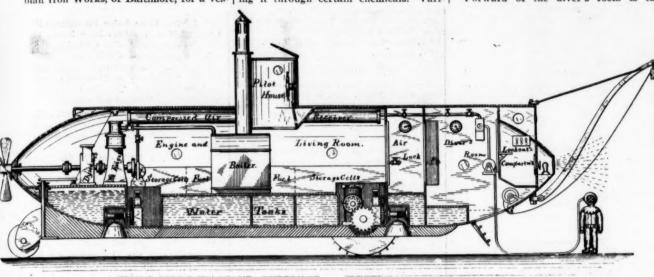
A New Submarine Boat.

A contract has been let to the Colum-

have about thirty cubic feet of free air per hour, at first sight it would appear that it would require a large reservoir capacity to carry sufficient air to last the crew for the forty-eight hours, but when it is taken into consideration that the air is compressed into tanks to about oneseventieth of its bulk when in its free state. it is seen that very small reservoirs are required. The carbonic-acid gas which is formed, being the heaviest, settles to the bottom of the boat, where it is pumped out, or it may be again vitalized by passbian Iron Works, of Baltimore, for a ves- ing it through certain chemicals. Vari-

all times while the divers are operating on the exterior of the vessel, yet by means of the air-lock compartment they can pass from the diver's compartment to the living-room as frequently as required. In the diver's room is also placed a telephone, a hose reel, hoisting engine and all the various pharaphernalia required in wrecking operation. In fact, it is a complete workshop which the diver always has at hand, without having to be hauled to the surface every time he wants a hammer, saw, etc.

Forward of the diver's room is the



SECTIONAL PLAN OF THE BOAT.

sel which is destined to revolutionize the present method of recovering cargoes of sunken ships and of wrecking generally, if what is claimed by the inventor is verified by its work. The craft is what is known as the Lake submarine boat, and is being built for the Lake Submarine Co. of Baltimore. Its dimensions are as follows: Length, 36 feet; diameter, 9 feet. It is to be constructed of threeeighths-inch steel plates, and will have a 2000 candle-power electric light and be operated by a thirty horse-power engine for compressing air, furnishing motive power and operating the electric plant. While this boat is only intended to be of an experimental character, it will be large enough to demonstrate the working of its inventor's plans, as it will accommodate several men, and, it is claimed, can be submerged to a distance of at least 150 feet below the surface of the water if desired.

Compressed air and electricity enter largely into the operation of this boat, which has been called a "submarine locomotive," as it is planned to travel along the bottom of the sea or lake after it has been sunk. It is, as will be noted in the accompanying illustration, divided into four compartments, called, respectively. the engine and living room, the diver's room, with an intermediate air-lock compartment, and a forward lookout and operating compartment. In the engine-room is placed the steam boiler and engine, which is used for propulsion when floating on the surface in the ordinary manner by means of the screw propeller. A dynamo is also provided, which may be connected to the steam engine for charging the storage-battery cells located in lockers on each side of the boat. This dynamo may also be used as a motor, and can be disconnected from the engine and used for running the propeller when submerged, if desired, although the method preferred is that of direct propulsion through the medium of the forward motor geared direct to the axle of the forward wheels.

In the engine-room is also located an air compressor and air receivers for renewing the air vitiated by the crew and also to furnish the air necessary to supply the divers when operating outside of

ous steam and electric pumps for handling | lookout compartment, in which the atthe water ballast are also located in this compartment.

Forward of the living-room and connected therewith through air-tight doors and the air-lock compartment is the diver's room. This has a door opening outward situated in the bottom through which the divers may readily pass in and

mosphere is normal. This is the pilothouse when traveling on the bottom. In it the operator also controls the hoisting machine and derrick for transferring the cargo from the sunken ship, etc. He also has control of the movements of the boat and supervises the work of the divers.

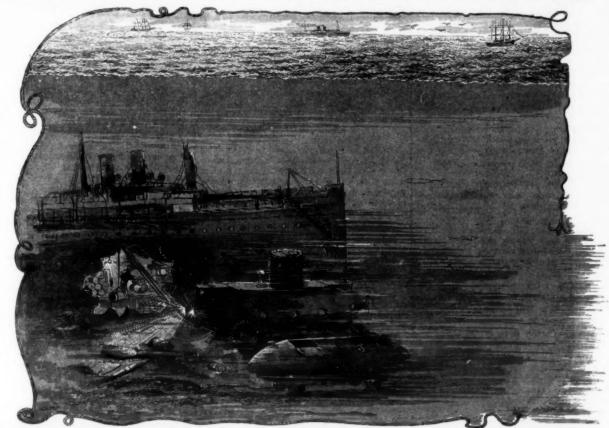
It is calculated that vessels of this class

surface at the will of the operator. It is capable of being propelled when on the surface, when submerged or when on the bottom, as required. Many of the operations in raising vessels, removing cargoes, etc., can be performed without going outside the vessel.

"The vessel is capable of searching the bottom by electric light in locating wrecks. The divers are always operating under the eyes and within the hearing of others, and in case of accidents of any kind can immediately receive assistance. Work from it can be carried on day and night and in stormy weather. It can be used in laying foundations for piers, bridges, docks, lighthouses, breakwaters, locks for canals, etc., all the operations of mining and handling of the stone being accomplished by power. It will also be of use in removing obstructions, such as rocks, shingle, etc., from entrances to harbors, all the drilling operations being accomplished by power, the workmen remaining in atmosphere at normal pressure while on the bottom. It can also be used in recovering victims of shipwreck, whose bodies are, as a rule, never recovered by divers."

A small model has already been tested at Atlantic Highlands, N. J., where three men submerged the boat and worked it along the bottom, as well as leaving it under water and picking up articles which had been thrown to the bottom by spectators of the test. This trial was witnessed by a number of residents of Atlantic Highlands, including Thomas H. Leonard, president of the national bank of that town.

The Lake Submarine Co. controls the patents of Mr. Simon Lake, the inventor, in this country and also in the principal countries of Europe. Its officers are Simon Lake, president; S. T. Champion, secretary; William T. Malster, treasurer, and J. C. Lake, general manager.



AT WORK ON A WRECK.

out without assistance from anyone. | can be built to withstand the pressure This bottom door can never be opened encountered at a depth of 300 feet below show that building permits to the amount until there is a pressure of air in the diver's room equal to the pressure of water on the exterior, corresponding to the depth of water the vessel may be in. When these pressures are equal, which is indicated by the hands of a pressure gage in the compartment, the door may be opened and no water will come into the the vessel. As a man working should interior. This pressure is maintained at

the surface, and remain several days on the bottom, if necessary. It is not thought, however, that wrecking will be carried on at this depth, except in a few instances.

The advantages claimed for the Lake boat are many. They are:

"It is capable of being submerged to

The reports of the city of Memphis of nearly \$500,000 were issued in 1896.

Mr. Thomas Richardson has been elected secretary of the Commercial League, of Houston, Texas. Mr. Richardson was connected with the deepwater utilization committee of Galveston. and is well known for his efforts in aid of any desired depth and again raised to the the commercial development of the State.

CONSTRUCTION DEPARTMENT.

THE MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

 Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the Manufacturers'

It often occurs that the organization of a new company in any town is not known by the postmaster, and hence letters addressed to the company are returned marked "not known." The Manufacturers' Record reports the first organization of all companies, and our readers, in seeking to get into communication with them, should be very careful in deciding how to address them, and even then they must expect the return of some letters, because of the lack of knowledge on the part of postmasters of all new companies. Criticisms and complaints are invited, as they will the better enable us to guard against errors.

ALABAMA.

Alco—Saw Mill.—The Peters Lumber Co. writes that it does not intend to rebuild its mill in the near future.

Athens—Water Works.—The city is now offering its bonds for \$15,000 for sale, and will arrange for construction of water system as soon as they are disposed of. Address the mayor.

Florence — Kindling-wood Factory. — The Lampson & Skinner Kindling Wood Co., of Toledo, Ohio, has been investigating at Florence with a view to the location of a factory.

Florence-Cotton Mill.—A movement is on foot for the organization of a company to build a cotton mill to work up the product of the Cherry Cotton Mills.

Florence — Woodworking Plant.—A movement is on foot for the organization of a company to establish woodworking plant.

Hurricane—Saw Mill.—The McMillen Cypress Co. will put in a new steam plant.

Louisville — Cotton Gin.—N. R. Stephens may rebuild his cotton gin.

Sheffield—Iron Mines, etc.—The Sheffield Coal & Iron Co. has contracted for the construction of a five-mile railroad, which will lead to the thorough development of the company's extensive iron-mining properties in Walker and Franklin counties. Two of the company's furnaces are now in blast and the third is preparing to blow in.

Tallassee — Cotton Mill. — The Tallassee Falls Manufacturing Co. intends to develop its present 23,000-spindle cotton mill to a plant of 50,000 spindles. This enlargement was contingent on the construction of the Tallassee & Montgomery Railroad, which has recently been completed.

ARKANSAS.

Beebe - Stave Mill. - The Beebe Stave Works are being enlarged.

Des Arc — Steamboat Company. — W. C. Shipp and others have incorporated the Des Arc Packet Co., with a capital stock of \$1500.

Knobel-Lumber Company.—A. Michener, Frank Ross and W. M. Betler have incorporated the Knobel Lumber Co., with a capital stock of \$7500.

FLORIDA.

Fernandina — Cannery.— The Cumberland Sound Packing Co. has commenced operations canning oysters; W. A. Mahoney, manager.

Green Cove Springs—Cannery.—The cannery under construction is rapidly nearing completion. F. H. Hope can give information.

Jacksonville — Cotton-rope Mills. — The American Manufacturing & Commercial Co. has been chartered, with capital stock of \$50,000, for the purpose of cultivating cotton and manufacturing cotton rope. J. E. T. Bowden is president; R. R. Goode, vice-president, and M. J. Christopher, secretary. All except the president and one director are colored men.

Tampa—City Improvements.—The city has received several propositions regarding the paving and other improvements which are proposed. T. N. Gillett, mayor, can be addressed for particulars.

GEORGIA.

Americus — Tannery and Shoe Factory.— Mr. Reeves, of Plains, and W. O. Barnett, of Americus, have purchased the tannery and shoe factory of Black & Reeves at The Plains and will remove the plant to Americus.

Atlanta — Shoe Factory.— The J. K. Orr Shoe Co., of Columbus, Ga., will use the new five-story building reported last week as a warehouse. Shoe manufacturing may be taken up later.

Augusta—Bridges, etc.—The Charleston & Western Rallroad, A. W. Anderson, superintendent, will construct a new steel bridge across the Savannah river, one across the canal and one across a creek at Laurens, S. C.

Buford — Gold Mines.— The Shelby Gold Mines Co., of Atlanta (141 Marietta street), has purchased and will thoroughly develop the Shelby mines near Buford. 'A permanent shaft will be sunk to intersect six or eight velns, steam holst and pump will be installed, and a 10 to 20-stamp mill erected, with concentrators and chlorinating plant. F. J. Rothpletz will manage the operations. F. I. Stone is president of the company; M. N. Blount, vice-president; M. M. Welch, secretary, and W. C. Hale, treasurer.

Columbus — Pottery.—The Columbus Pottery Works has completed its plant and has been in operation for several weeks. H. M. Howard, of Columbus, and Mr. Matthews, of Rock Mills, Ala., are proprietors.

Columbus—Warehouse Company, etc.—The W. C. Bradley Co. has been incorporated by W. C. Bradley, A. S. Dozler and others, with a capital stock of \$100,000; purposes, to conduct warehouse business, operate compresses, etc.

Columbus—Cottonseed-oil Mill.—The Mutual Cotton Oil Co. will enlarge its present capacity at the end of the season. The erection of a refinery is also talked of.

Cordele—Ice Plant.—S. R. Sims, of Americus, has bought and will operate the Cordele Ice plant.

Dawson-Laundry.-W. E. Gore contemplates the establishment of a laundry.*

High Shoals—Cotton Mill.—It is reported that the High Shoals Manufacturing Co. contemplates the erection of another cotton mill.

Hogansville—Cotton Mill.—Jacob Elsas, of Atlanta, is endeavoring to arrange for the establishment of a \$100,000 cotton mill at Hogansville.

McRae — Publishing.— J. A. Peacock will publish a newspaper.

Savannah—Premium Company.—Nicholas Lang and others have incorporated the Mutual Premium Co., with a capital stock of \$5000.

KENTUCKY.

Crowley-Cannery.—J. P. Glenn, of Arcola, La., is negotiating with W. W. Duson & Bro. for the removal of a \$7000 cannery to Crowley.

Louisville—Mercantile Company.—Arthur Peter, M. C. Peter and others have incorporated as Arthur Peter & Co., with a capital stock of \$150,000, for conducting a mercantile business.

Louisville-Mercantile Company.-Samuel

Auerbacher and others have incorporated the Auerbacher-Gilmore Co., with a capital stock of \$15,000, for conducting wholesale grocery business, etc.

Madisonville — Water Works. — M. W. Bishop and Samuel Powers, committee on water works, will submit to the city a plan for the construction of a complete system to supply the city. About \$25,000 is estimated as the cost. Address the mayor.

Owensboro—Cellulose Factory.—The Marsden Cellulose Co. has purchased site for its new factory; building will be four stories high, 48x126 and 58x158 feet; A. C. Taggert, manager.

LOUISIANA.

Natchitoches—Water Works.—J. A. Holmboe, of Louisville, Ky., is preparing plans for the city's proposed water works, already reported. About \$17,000 will be expended Address the mayor.

New Orleans — Canal.—The New Orleans & Western Railroad, J. M. Turner, general manager, has commenced the construction of a canal.

New Orleans—Fibre Mills.—The Douglas Fibre Co., Limited, has been incorporated, with a capital stock of \$500,000, by E. W. Douglas, W. F. Mayhew, Andrew Schultze and others; purpose, to manufacture ramie and other fibres, sell machinery for treating fibre, etc.

Pollock—Saw Mill.—The Big Creek Lumber Co. will overhaul its plant preparatory to resumption of operations.

Shreveport — Furniture Factory.—A company has been organized to build a furniture factory.

MARYLAND.

Baltimore—Iron Furnace.—The Maryland Steel Co. will blow in at once furnace A at Sparrow's Point, giving employment to 135

Baltimore — Liquor Company. — John B. Brown and others have incorporated the J. B. Brown Co., with a capital stock of \$30,000, to manufacture and deal in liquors, etc.

Baltimore—Subway System.—The Electrical Commission has issued a report of its plans for the city's proposed subway system, previously announced. Nicholas S. Hill, Jr., engineer to the commission, prepared the plans, etc. The amount to be appropriated for this work will be \$1,000,000; Alcaeus Hooper, mayor.

Baltimore—Export Grain Company.—The Frick Export Co. has been incorporated, with capital stock of \$15,000, by Frank Frick, Jr., and others.

Cumberland — Electric-light Plant. — The city council has passed an ordinance for an election to be held for the purpose of securing a \$20,000 electric-light plant. Address the mayor.

Hagerstown—Heater Works.—George Holland, of Baltimore, is conferring with the Merchants and Manufacturers' Association relative to locating a factory for making radiators for heating purposes.

Hagerstown—Electric Plant.—The Hagerstown Electric Co. will, as reported last week, enlarge its plant. It intends to build an entirely new power-house of about 700 horse-power, to be supplied to commercial and private houses.

Hagerstown—Knitting Mills.—John Blood, Brother & Jackson, of Philadelphia. Pa., are said to be treating with the Merchants and Manufacturers' Association relative to removing an underwear and stocking mill to Hagerstown.

MISSISSIPPI.

Magnolia-Mercantile.—E. C. Briley and others have incorporated the Magnolia Mercantile Co., with a capital stock of \$15,000.

Port Gibson-Water Works.—The city will construct the proposed water works during 1897. The bonds for \$20,000 were voted recently, and definite arrangements will doubtless be made soon for awarding contract; Thomas M. Rea, city clerk.

MISSOURI.

Excelsior Springs—Gold Mines.—The Excelsior Springs Mining Co. was organized last year to develop gold mines near Excelsior Springs. It is claimed that valuable deposits have been found, and extensive operations are expected to be inaugurated. H. H. Sawyer, Kansas City, Kans., president, can be addressed.

Monticello — Creamery, etc.— W. L. Watson, W. R. Legg and O. C. Clay have incorporated the Monticello Butter & Cheese Factory Co., with a capital stock of \$4700.

Ozark — Water Works.— The city council has gravted franchise to John C. Rogers for the construction of a water-works system.

Richmond — Water Works.—The city has awarded contract to the Seekner Contracting Co., of Chicago, for the construction of the water works recently reported.

St. Louis — Commission Company.— F. C. Frauernicht and others have incorporated the Frauernicht-Shanks Commission Co., with a capital stock of \$15,000.

St. Louis—Manufacturing Company.—The Electric Depositing & Manufacturing Co. has been incorporated, with capital of \$5000, by Charles H. Huntley and others.

St. Louis—Manufacturing Company.—H. M. Leonard and B. Paliette have incorporated the Bula Manufacturing Co., with a capital stock of \$50,000.

Willard—Grist Mill, etc.—A. D. Morgan contemplates the development of waterpower to operate a grist mill, which he also contemplates.*

NORTH CAROLINA.

Charlotte — Spring-bed Factory. — R. M. Oates, Jr., John C. Mallonee and J. J. Mallonee have incorporated the Charlotte Perfect Spring Bed Co. to manufacture beds, as indicated. Capital stock is \$5000.

Nebo—Telephone Lines.—The Cumberland Telephone Co. has completed its line and is considering constructing to Dalton, Richland and Silent Run.

Raleigh — Electric-light Plant.—The Raleigh Street Raliway Co. will rebuild its burned electric-lighting plant.

Winston — Tobacco Factory.—The Chamber of Commerce is endeavoring to secure the location at Winston of the factory proposed as a Southern branch of the Drum Tobacco Co., of St. Louis, Mo.

Winston — Chair Factory.—The establishment of a chair factory is proposed. The secretary Chamber of Commerce can give information.

Winston — Tobacco Factory.— The Drummond Tobacco Co., of Philadelphia, Pa., is corresponding with the Chamber of Commerce relative to the establishment of a factory in Winston.

Winthrop - Saw Mill. - Samuel Bacon & Son are rebuilding their saw mill.

SOUTH CAROLINA.

Charleston — Mercantile. — A. S. Phillips and J. M. Meyers have incorporated the Phillips & Meyers Co., with a capital stock of \$5000.

Georgetown — Rice Company. — L. Breslauer, M. Moses, S. M. Ward and others have incorporated the Guendalos Rice Co. to deal in and cultivate rice, etc. Capital stock is \$5000.

Rock Hill—Cotton Mill.—There are rumors of another mill being erected. T. L. Johnson is mentioned in connection with the report.

Seneca—Cotton Mill.—The Seneca Manufacturing Co., capital stock \$350,000, recently incorporated, has formally organized, with J. F. Schirmer as president, and S. K. Dendy, secretary. It is proposed to build a print-cloth mill of 20,000 spindles and 650 looms, and order for the machinery has been placed; building to be three stories high, 300x103 feet; H. S. Chadwick, of Charlotte, N. C., engineer.

Seneca—Cotton Mill.—W. O. Hamilton, W. A. Lowrey, G. W. Gignilliat and others have incorporated the Hamilton Manufacturing Co., with the purpose of erecting a mill for manufacturing twine, rope, cotton cloth, etc. Capital stock is \$25,000.

TENNESSEE.

Chattanooga — Medicine Company.-J. B. Spencer, Alfred and C. J. Armitage and T. W. and Ernest Keller have incorporated the Spencer Medicine Co.

Chattanooga-Woodenware Factory.—The Benjamin Butter Dish Co. will doubtless rebuild its burned factory.

Chattanooga—Distillery.—Betterton & Co. are reported as soon to commence work on a new distillery.

Dayton — Furnace and Coke Ovens.—The Dayton Coal & Iron Co., Limited, blew in its No. 1 furnace on January 3; company is Vat-

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also preparing to construct fifty coke ovens, as recently reported.

Memphis-Cotton Mill.-C. M. Brandon, of Florence, Ala., and Mr. Jones, also of Florence, contemplate leasing and operating the Bluff City Cotton Mills.

Alpine-Cattle Company.-The Alpine Cattle Co. has been incorporated, with a capital stock of \$125,000, by Alfred C. Gage and others.

Angleton .- Furniture and Wagon Factory. Independence (Texas) parties have closed a contract with the townsite to remove a furniture and wagon factory to Angleton and be in operation in sixty days.

Angleton-Telephone System .- The Angleton Telephone Co. is constructing a line from Angleton to Velasco, a distance of fifteen and one-half miles, and intends to construct to Alvin, a distance of twenty-three miles. George G. Garrett is contractor for the line work.

Austin — Mining Company. — The Austin Mining Co. has been incorporated, with a capital stock of \$10,000, by A. T. Anderson, N. J. Badu and others.

Cooper-Sugar Factory, etc.-It is stated that German parties have made a proposition for the establishment of a beet-sugar factory at Cooper. Texas Midland Railroad officials are said to be pushing the enter-

Corsicana - Petroleum Association .- The Texas Petroleum Oil Association has been chartered, capital stock \$10,000, to develop wells, etc. James Garrity, Chas. H. Allyn and others are incorporators.

Corsicana-Tannery.-The Navarro County Tanning Co. has been organized, with W. S. Beeson, general manager, and J. C. Rogers, head tanner. A tannery to use 200 hides per month will be erected immediately.

Corsicana - Iron Works .- The Corsicana Iron Works has been purchased by Carlier & Wilson, of Waco, and the plant will be put in operation at once. Improvements will be made, including enlargements, additional machinery, etc.

Corsicana - Woodenware Factory. - It is stated that the Richmond Cedar Works, of Richmond, Va., contemplates the erection at Corsicana of a branch plant to employ 200 men.

Corsicana—Soap Factory.—The cotton-oil refinery and the butchers of Corsicana have annually from 1000 to 3000 pounds of grease suitable for soapmaking, and are endeavoring to make arrangements with some practical soapmaker to establish a factory. Local capital will interest itself, and correspondence is invited. Address the Commercial Club

Denison - Machine Shops, etc.-The Missouri, Kansas & Texas Railroad will rebuild its burned blacksmith shops on the old site. The company also has in view the removal in the near future of its machine shops from West Denison to Denison. Last year \$100,000 was voted for the latter work; A. D. Bethard, superintendent, Denison.

Galveston - Wharf Improvements. - The Galveston Terminal Co. has been incorporated for wharf improvements, etc., with capital stock of \$300,000; George E. Mann, M. N. Mann, M. C. McLemore and V. E. Austin, incorporators. This company will construct terminals for the Southern Pacific Rallroad, purchasing large tracts of land for the purpose, build warehouses, wharves, etc.

Granger - Mercantile .- D. R. Meade, W. W. Walton and W. H. Walton have incorporated the Meade & Walton Co., with a capital stock of \$25,000.

Houston-Gas Plant.-The Hall Chemical & Gas Co., W. L. Baker, agent, is endeavoring to obtain franchise for the erection of a gas plant.

Jacksonville - Mercantile .- The Jacksonville Dry Goods Co. has been incorporated, with a capital stock of \$20,000, by J. D. Crawford, A. Harris and H. Mandelstamm.

Marshall-Mercantile.-M. Lothrop, J. D. Crawford and A. C. Alexander have incorporated the Marshall Wholesale Grocery Co., with a capital stock of \$25,000.

Ranger-Water Works.-A \$2500 company has obtained charter and will construct water works. Address the mayor.

San Marcos-Mercantile.-Charles Hutchings, D. L. Edwards and W. D. Talmadge have incorporated the San Marcos Mercantile Co., with a capital stock of \$25,000.

VIRGINIA.

Alexandria - Lumber Company. - E. E. Jackson, of Salisbury, Md.; Joseph L. Crupper, of Alexandria, Va., and Noah H. Rider, of Washington, D. C., have incorporated the

E. E. Jackson Co., with a capital stock of \$150,000.

Alexandria-Timber Company.-A charter has been granted to the American Timber Export Co., with capital stock of \$10,000. Richard G. Park, of Westchester, Pa., is president, and J. S. Beach is agent in Alexandria.

Bedford City-Electric-light Plant.-John D. Langhorne, of Washington, D. C., who recently purchased the electric-light plant, has formed a company to continue the operation of same. J. A. Clark is president; Allen Cuculler, secretary, and J. M. Claytor, O. B. Smith and W. B. Dunn, directors.

Bedford City-Machine Shop.-H. G. Mc-Ghee & Co. will build a machine shop.*

Big Stone Gap - Paper Mill. - John M. Crowell, of Bristol, Tenn., may probably erect a paper mill at Big Stone Gap, instead of at Bristol, as at first intended. Machinery has all been purchased.

Coolwell-Machine Shops, etc.-The Southern Railway (J. H. Holt, general foreman, Washington, D. C.,) has purchased fifty acres of land at Coolwell to be used as the site for the erection of machine and repair

Irvington-Fertilizer Factory.-The Reese Manufacturing Co. has been incorporated, with a capital stock of \$100,000, to manufacture fertilizers, etc.; George O. Manning, Sr., president; J. F. Bussells, general manager, and J. C. Manning, treasurer.

Lynchburg - Dye Works.-The Stamford Manufacturing Co., of Stamford, Conn., is rapidly completing its branch plant near Lynchburg and expects to commence operations within thirty days; will make dyes from vegetable product.

Norfolk - Land Improvements.-The Virginia Land & Improvement Co. has been chartered, with capital stock placed at \$25,000; purpose, to deal in real estate, etc.

Richmond-Gas Plant.-A charter has been granted to the Richmond Gas Co., with a capital stock of \$50,000, and Alten S. Miller is president; Edward J. Willis, secretarytreasurer. The company has made a proposition for the lease of the city gas works. Ware B. Gay has made a proposition for the lease of the city gas plant. George McD. Blake will probably make a proposition for leasing the city gas plant.

WEST VIRGINIA.

Benwood-Electric Plant, etc.-The Baltimore & Ohio Railroad Co. (main office, Baltimore, Md.,) proposes extensive improve-ments at Benwood, including the erection of a big electric-lighting plant.

Charleston-Coal Mines.-A dispatch from Charleston says that Baltimore (Md.) parties have leased for development valuable coal lands on the West Virginia Southern Railroad. It is said that the Thadmore Coal Co. will be the name under which operations will be forwarded.

Favette County - Steel Bridges. - S. G. Walker, of Charleston, has closed contract for the construction of two steel bridges for Fayette county; bridges to cost \$28,500.

Mannington-Glass Works.-Arrangements bave been concluded for the erection of the glass works already referred to. F. R. Warden, J. O. Tuey and W. S. Danier, of Mannington, and W. H. Bannister and A. M. Fox, of Fostoria, Ohio, are interested.

Webster - Bottling Plant .- The Webster Springs Bottling Co., capital stock \$100,000, has been incorporated for the operation of a bottling plant. Incorporators are George M. Whitescarver, of Grafton; Myer Newberger and George Newberger, of Parkersburg, and others.

BURNED.

Chattanooga, Tenn.-The Benjamin Butter Dish Co.'s factory; loss \$15,000.

Cotulla, Texas. - The county courthouse; loss \$30,000. La Grange, N. C.-Grist and planing mill

of Sutton & Walters; loss \$4000. Poplar Grove, Ark.-Cotton gin of Mrs. V.

White; loss \$2000. Raleigh, N. C. - Raleigh Electric Street

Railway Co.'s power plant; loss \$50,000. Taneytown, Md. - Flour mills of A. H.

Zollickoffer: loss \$15,000. Vicksburg, Miss.-The McInenerny Candy Factory; loss \$2000.

Washington, D. C.-Wm. J. Zeh's saw

What is believed to be an exceptional opportunity to secure a fine equipment for a knitting mill is shown in our advertising columns. Woodward & Stillman, 16 William street, New York city, offer for sale a complete outfit for making flat underwear.

BUILDING NOTES.

Angleton, Texas-Business Block.-F. Conlon is building a brick business block, seventy feet front, two stories high.

Angleton, Texas-Courthouse.-The commissioners' court has ordered bids to be solicited until February 8 for the construction of a courthouse. A. R. Masterson, county judge, can be addressed in regard to plans and specifications.

Atlanta, Ga.-Dwelling.-George F. Barber & Co., of Knoxville, Tenn., have prepared plans for a dwelling to cost \$5000 for L. P. De Groot, care of Willer Manufacturing Co.

Atlanta, Ga.-Warehouse.-The J. K. Orr Shoe Co., of Columbus, Ga., will build a five-story and basement warehouse in Atlanta. Shoe manufacturing may be taken up later.

Bay City, Texas - Dwelling .- C. T. Simmons will build a \$3000 dwelling.

Camden, S. C .- Dwelling .- W. J. Dunn will build a dwelling to cost \$2500 after plans by George F. Barber & Co., of Knoxville, Tenn.

Canton, Miss .- Dwelling .- B. L. Roberts will build a dwelling to cost \$4500 after plans by George F. Barber & Co., of Knoxville, Tenn.

Chattanooga, Tenn.—Church.—H. D. & J. C. Breeding have prepared plans for a church building to cost \$4000; Rev. C. H. Trusty, pastor.

Chattanooga, Tenn.-Dwelling.-H. D. & J. C. Breeding have prepared plans for two frame dwellings for Charles Gorman.

Ducktown, Tenn.-Dwelling.-J. M. Rostelle will build a dwelling.

Fitzgerald, Ga.-Mercantile Houses.-The Boyd Hardware Co. will erect a brick build-

Graniteville, S. C .- Mill Buildings .- The Warren Manufacturing Co. has plans and specifications now ready for contractors' bids on cotton-mill buildings. Address Chas. W. Davis, president.

Greenville, S. C .- Dwelling .- George F. Barber & Co., of Knoxville, Tenn., have prepared plans for a \$2500 dwelling for Thos. B. Whitmire.

Harriman, Tenn.-Depot.-The Cincinnati Southern Railroad Co. (H. M. Waite, superintendent buildings, Lexington, Ky.,) will build a big freight depot at Harriman.

Jackson, Miss. - Capitol Building. - The commission on the new capitol building has decided to accept the plans submitted by Weathers & Weathers, of Memphis, Tenn. The plans show a building three stories high, of fire-proof material throughout, granite, steel, limestone, three electric elevators, two passenger and one freight; gas and electric fixtures throughout, with plants for manufacturing same; grand central dome of steel, copper and glass, etc. cost is to be from \$550,000 to \$1,000,000, according to selection of materials. I. M. Weathers is to devote his entire time to superintending the erection of the structure; J. H. McLaurin, governor.

Jonesville, Va.—Dwelling.—George F. Barber & Co., of Knoxville, Tenn., have prepared plans for a \$2500 dwelling for C. T.

Lexington, N. C.-Hotel.-Plans have been prepared by C. C. Hook, of Charlotte, N. C., for the proposed hotel recently mentioned. The building will be three stories high, thirty rooms, electric lights, steam heat, etc. C. M. Thompson, W. G. Penry, M. H. Pinnex and Grimes Bros. are interested.

Magnolia, Miss.-Dwellings.-J. H. Prise and G. C. Briley will each erect residences.

Magnolia, Miss.-Warehouse.-The Lampton Mercantile Co. will build a one-story warehouse.

Manchester, Va.-Church Building.-Central Methodist Church will build a new structure; A. D. Shotwell, member of com-

McMinnville, Tenn.-Courthouse.-A com mittee is now considering plans for the proposed new courthouse. About \$15,000 will be appropriated for the work. Address F.

M. Smith, chairman. Miami, Fla.-Dwellings.-E. L. Brady & Co., the Bank of Bay Biscayne, Glenn Strohm, E. L. Brady & W. L. Brown and E.

H. Chase have each contracted for the erec tion of brick buildings. Moultrie, Ga.-School.-The city will hold an election to vote on issuing \$5000 in bonds for the erection of a schoolhouse. Address

the mayor. Moultrie, Ga. - Warehouse. - H. Huber will build a brick warehouse.

Street is organizing ascompany to build a warehouse

Newport News, Va.-Business Block.-Elliott Slaughter will build a brick business

Plaquemine, La.-Office Building.-George F. Barber & Co., of Knoxville, Tenn., have prepared plans for an office building for Louis Lozano to cost \$1600.

Shreveport, La.-Hotel.-Mrs. Bremer has let contract to Garson Bros. for the erection of a 16-room hotel building.

Skyuka, N. C.-Hotel.-George F. Barber & Co., of Knoxville, Tenn., have prepared plans for an \$8000 hotel for D. E. Stearns.

Spartanburg, S. C.-Cudd & Roberts will erect a three-story brick building.

St. Louis, Mo.-Clubhouse.—The St. Louis Club will build a new house. Over \$200,000 will be expended on site and building. Address the secretary of the club.

St. Louis, Mo .- Theatre .- Harry Davis, manager of Grand Opera House, Pittsburg, Pa., will build a theatre in St. Louis.

Union, S. C.-Dwelling.-George F. Barber & Co., of Knoxville, Tenn., have prepared plans for a \$5000 dwelling for W. D. Arthur.

Washington, D. C. - Dwellings. - A. B. Morgan has prepared plans and Wm. A. Kimmel has contract for erecting fourteen three-story houses.

RAILROAD CONSTRUCTION.

Anniston, Ala.-It is reported that a Minnesota party named Wallace has become interested in the Ashville & Whitney line, and may extend it from Anniston to Oneonta, in Blount county.

Augusta, Ga.-The Augusta & Aiken Railroad Jo. has been chartered to build a line between the points named, a distance of eighteen miles. Lelander and Charles Kirkpatrick and Edward H. Cloud, of Philadelphia, are interested.

Baton Rouge, La.-It is reported that work of grading the Baton Rouge & Central Louislana has begun at two points on the proposed line. It has been surveyed from Baton Rouge to Simsport. F. M. Welsh, of Alexandria, is promoting the project, and W. L. Hollinquist is chief engineer.

Belington, W. Va.—The Roaring Creek & Belington road has been completed from Belington through Roaring Creek valley to a connection with the West Virginia Central system. It is thirty-six miles long. J. S. Fisher is president of the company, and O. C. Womelsdorf, at Womelsdorf, W. Va., general manager.

Birmingham, Ala. — The Tennessee Coal, Iron & Railway Co., it is reported, has given a contract to build five miles of railway from Russellville, Ala., to the ore beds on Hamilton creek. The road will be a branch of the North Alabama road. E. Ramsay, at Birmingham, is chief engineer.

Chattanooga, Tenn. — Surveys have been completed for the proposed line between Chattanooga and Lula for the company in which E. A. Richards and others, of Atlanta, are interested. P. P. Lawrence is

Fayetteville, Ark.-The citizens of Springdale are agitating the plan of building an electric line from Fayetteville to Springdale. The Fayetteville Railway Co., of which John A. Griffin is president, is promoting the project.

Galveston, Texas. - The Galveston Terminal Co. has been chartered to construct a road from Galveston to Pelican Island, which will include a bridge. It is reported that the Southern Pacific Company is back of the new corporation. W. G. Van Vleck, general manager of the Southern Pacific, may be addressed at Houston, Texas.

Hot Springs, Ark.-The citizens of Hot Springs have appointed a committee to promote the construction of a line from Hot Springs to a connection with the Kansas City, Pittsburg & Gulf system. Kansas City, Mo.-The Kansas City, Pitts-

burg & Gulf, it is reported, has awarded the contract for the proposed road from Pat-tonsburg to Trenton, Mo. It is expected also to build a branch from Kan Pattonsburg. Robert Gillham, at Kansas City, is chief engineer.

La Follette, Tenn.-The scheme to build a line through the La Follette Coal & Iron Co.'s property has resulted in the formation of the Tennessee Northern Railroad Co. to build a line from a connection with the Knoxville & Ohio, in Campbell county, to Jellico, by way of Big Creek Gap and La Follette. The total length of the road New Berne, N. C. - Warehouse. - N. H. | will be about 100 miles and include a branch

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to Knoxville. H. M. La Follette is interested:

Lexington, Ky .- The project of extending the Lexington & Eastern road into the Morgan county coalfields has been revived. It is reported that the extension will be built from the railroad to Walnut Grove, thirty miles. H. C. McDowell is president.

Little Rock, Ark .- The Little Rock Board of Trade is agitating the idea of building the proposed extension of the Little Rock & Memphis road with convict labor. understood that this labor can be furnished. H. L. Brinkley, of Memphis, is among those interested in the matter.

Mobile, Ala.-It is reported that the Mobile, Jackson & Kansas City road has been completed for six miles out of Mobile. F. B. Merrill, at Mobile, is general manager.

Montgomery, Ala. - A majority of the stockholders of the Mobile & Ohio have ratified the action of the bondholders in deciding to construct the branch from Montgomery to Columbus, Miss.

Montgomery, Ala.-The Louisville & Nashville Company will construct several additional freight sidings in the city. R. Montfort, at Louisville, is chief engineer.

Nashville, Tenn. - It is stated that the Nashville & Knoxville road has been sold to a St. Louis syndicate, which will connect it with the unfinished Tennessee Central and complete the proposed route from Nashville to Knoxville. A. J. Crawford is president of the Nashville & Knoxville. His address is Terre Haute, Ind.

New Orleans, La.-The New Orleans, Fort Jackson & Grande Isle is reported to be considering an extension of its line towards the coast. H. C. Warmoth is president of the company.

River Falls, Ala. - The Manufacturers' Record is advised that W. Y. Van Kirk, of Pensacola, Fla., and B. B. McKenzie, of Dunham, Ala., are interested in the proposed road from River Falls to the Dunham Lumber Co.'s tract. Parties from Greensburg and Uniontown, Pa., are also interas already stated in the Manufacturers' Record.

San Antonio, Texas. - The Von Ormy-Medina Railway Co. has been formed to build a tramroad for mule power from San Antonio to Von Ormy, twelve miles. F. Villereal is president of the company, and J. B. Bywaters, vice-president.

Sherman, Texas.-It is reported that the Texas, Louisiana & Eastern is to be extended from Trinity to a connection with the Kansas City, Pittsburg & Gulf system at Silsbee. Samuel Lazarus, at Sherman, is manager.

Terrell, Texas.-It is stated that Prest. E. H. R. Green, of the Texas Midland, has decided to extend this system from Ennis to Galveston and Velasco by building from Ennis to Waco and by acquiring a line already completed from Houston to Galveston and using the Houston & Texas Central from Waco to Houston. The new mileage required would be about seventy.

Winston-Salem, N. C.-The business men have begun a movement in favor of another railway to extend from Winston-Salem to Monroe, on the Seaboard Air Line, and have appointed a committee to secure a charter from the next legislature.

Street Railways

Charleston, S. C.—It is reported that another effort is being made to consolidate the Enterprise and City Railways and to rebuild them for the use of electric motors. T. W. Passailalgue is among those inter-

Machinery, Proposals and Supplies Wanted.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the coun-The MANUFACTURERS' REC-ORD has received during the week the following particulars as to machinery that is wanted.

Boiler. - Wanted, a twenty-five horsepower steam hoist, upright boiler, single drum, 36-inch double cylinder, 8x10. Address Lock Box 1303, Philadelphia, Pa.

Boller and Engine.-J. Fred Fisher, Lock Box 380, Florence, Ala., wants quotations

on steam plant, twenty-five horse-power boller and engine, pump, etc.; new or secoud-hand, in good condition.

Boilers and Engines. - See "Railway Equipment."

Corn Mill. - W. W. Watkins, Aberdeen, Miss., is in the market for a corn mill.

Cotton-duck Goods .- F. H. Hardy, Siluria, Ala., wants to buy cotton-duck caps for advertising purposes.

Cotton Gins .- N. R. Stephens, Louisville, Ala., wants catalogues of cotton gins, etc.

Cotton Gins .- W. W. Watkins, Aberdeen, Miss., is in the market for two 70-saw cotton gins, steam packing, revolving-box cotton press, with suction and fan, etc.

Crushing Machinery.-Thos. C. Crenshaw, Jr., Cartersville, Ga., wants to buy a machine for crushing ochre even, fine and smooth; about twenty or thirty tons in twelve hours.

Electric Equipment.—See "Railway Equipment.

Electric-light Supplies.-The Dayton Electric Light Plant, Dayton, Tenn., will soon want ten long-burning alternating arc lamps.

Engine.-The Gas Engine & Power Co. John J. Amory, manager, Morris Heights, New York city, is in the market for an engine suitable for use in connection with a marine railway for hauling out yachts.

Engine. - Wanted, a good second-hand steam engine, ten horse-power, at 1332 Hanover street, Baltimore, Md.

Engine.-The Aldrich Stone Co., Sanford, N. C., wants prices on a double-drum, 10 to 15-ton-capacity steam hoisting engine; second-hand machine will do.

Excelsior. - Gilliam & Harrison, Petersburg, Va., want to buy excelsior in carload lots.

Grist Mill .- A. D. Morgan, Willard, Mo. wants information about grist mills, estimates on cost, etc.

Grist Mill.-F. S. Smith, Mappsburg, Va., wants a good second-hand vertical burn grist mill, not over 15-inch runner.

Hoisting Plant.-See "Boiler."

Ice and Cold-storage Plant.-The Crystal Ice Co., Grafton, W. Va., is in the market for a 15-ton ice machine.

Ironworking Machinery.-W. L. Giddens, Laredo, Texas, wants to buy rollers for three-high Monitor roller mill.

Laundry. - W. E. Gore, Dawson, Ga., wants information on laundry machinery.

Letter Boxes.-Proposals will be received until January 25 for supplying street letter boxes, in different sizes, etc. Address Wm. Wilson, postmaster-general, Washington, D. C., for particulars.

Lumber. — The Wellsboro Manufacturing & Building Co., Wellsboro, Pa., is in the market for a bill of North Carolina pine

Machine Tools.-H. G. McGhee & Co., Bedford City, Va., will want 16-inch lathe, drill press, small miller, taps, dies, reamers, etc.

Mattress Machinery. - T. K. Hudgens, Easley, S. C., wants prices on machinery for mattress making.

Plumbing, etc.—Sealed proposals will be opened January 27 for plumbing and gas piping in United States postoffice building at Washington, D. C. Address W. M. Aiken, supervising architect, Washington, D. C. (See advertisement in Manufacturers' Rec-

Pumping Station.—Bids for constructing the new pumping station, two pumps, at Chain of Rocks, St. Louis, Mo., will be opened February 16. Address Robert E. McMath, president board of public improvements.

Railway Equipment.—The Newberry Phosphate Co., Box 357, Ocala, Fla., wants to buy a three-foot-gage locomotive, secondhand.

Rallway Equipment. - The Borde Engineering Co., 402 London, Liverpool & Globe Building, New Orleans, La., is in the market for rails, fastenings, crossties, poles, generators, engines, boilers, cars, etc., for seven-mile railway.

Sailboat .- E. W. Mallory, St. Mary's, W. a., wants catalogues and cash pri sailboat complete, about sixteen feet long, for river use.

Steam Launch. - Charles C. Nickerson, Easton, Md., wants to buy a pleasure launch between twenty and thirty feet, to be driven by vapor engine.

Street Sweeper. - The city of Winston, N. C., will buy a street sweeper. Address T. J. Wilson, secretary.

Water Wheels .- A. D. Morgan, Willard.

power development; wants to know what size turbine wheel will give most power.

Woodworking Machinery. - J. D. Hardy, Calera, Ala., will be in the market for large size shingle machine and 40-inch saw.

TRADE NOTES.

A recent shipment of a pair of McCormick turbine water wheels was made from the works of S. Morgan Smith, York, Pa., to the Clifton Manufacturing Co., Clifton, S. C. They will develop 1000 horse-power. The McCormick wheel is much sought after in the development of water-powers in the South. High efficiency and good records are rapidly extending the prestige of this

The Clonbrock Steam Boiler Co., of Brooklyn, N. Y., has secured the entire boiler contract for the Tennessee Centennial Exposition, to be held the first of May next. This is considered quite a triumph for the Climax boilers, considering that boilers of well-known merit were in the competition. The recognition of the good qualities of the Morrin Climax boiler, made by this concern, is an approval that is well deserved.

The United Electric Co., of Springfield, Mass., is about completing its new station at Indian Orchard, and placed an order with the Jewell Belting Co., of Hartford, Conn., for four 40-inch Jewell dynamo belts, each seventy feet long. This company in its different plants has thoroughly tested most of the more prominent makes of belting, and places this order with the Jewell Company on account of the excellent records made by belts of this manufacture which have been in use a number of years.

A folder explaining how the life of an old roof may be prolonged at small expense will interest many property-owners. It is said that the destruction of metal by corrosion or rust is vastly greater than by use. To check this and protect metal is the object of Allen's anti-rust japan, described by the folder. In color it is a beautiful, glossy jet black, over which, if desired, any color of paint can be applied. The Allen Anti-Rust Manufacturing Co., 413 Vine street, Cincinnati, Ohio, is the manufacturer.

Announcement is made by the Hancock Inspirator Co., Boston, Mass., that it will hereafter conduct the sales of its goods directly from the company's headquarters. The arrangement with the Fairbanks Co. as exclusive selling agents has been terminated. The products of the Hancock Company are recognized for the fine mechanical ideas they represent and the usefulness which they possess. They include the stationary pattern inspirators for stationary boilers, injectors, ejectors and general jet apparatus.

A recent addition to the products of the & C. Co., Chicago, is a pressed steel brake shoe key, which possesses many advantages. The company has acquired all rights to manufacture this device, which is master car-builder's standard. Now known as the Q. & C., it was formerly called the Drexel. The facilities of this company to manufacture in large quantities will be a convenience for the trade. Light in weight, durable and economical, as well as satisfactory in service, large sales are anticipated.

The People's Electric Light & Power Co., of Newark, N. J., burned out on Tuesday night, December 29. Charles A. Schleren & Co., of 45 Ferry street, New York city, re-ceived an order Wednesday, December 30, at noon, for 118 feet of 72-inch three-ply leather belting, to be put on at station of the light company, in complete running order, at 4 o'clock on December 31. By working several gangs of men all night, Schieren & Co. were able to do the job in twenty-eight hours after receipt of order. This is the quickest time on record for an order of this magnitude. This firm has just eceived an order for 116 feet of 72-inch three-ply leather belting from the Brooklyn Heights Railroad Co., of Brooklyn, N. Y., after the railroad company had tried several other makes. They are now also working on an order for 1261/2 feet of 72-inch three-ply leather belting for the North River Electric Light Co., of New York city.

In a paper recently read before the Western Society of Engineers by H. F. J. Porter, general Western sales agent of the Bethlehem Iron Co., he spoke of the hollow-forged shafts which he was introducing on the Mississippi and Ohio rivers, and said that compared with a wrought-iron shaft fourteen inches in diameter and thirty feet long, whose strength would be taken as Mo., wants information concerning water- | unity, a solid steel shaft would be one-third

stronger. Other statements made by him of interest were that a solid nickel-steel shaft would be one and one-half times stronger; a steel shaft of the same outside diameter with a three-and-one-half-inch hole through it and oil-tempered would be twice as strong; a hollow nickel-steel shaft of the same type would be three times as strong; a hollow-forged steel shaft of the same type would be three times as strong; a hollowforged steel shaft of the same weight, but of twenty-two inches outside diameter, and with a 17-inch hole through it, would be three times as strong, and if oll-tempered four and one-half times as strong; if made of nickel steel it would be six times, and if oll-tempered eight times as strong. Under such conditions it is not surprising that the boat-owners on the rivers are taking advantage of this improved type of shaft, in view break after short service of solid wrought-iron shafts, causing as they often do much damage.

TRADE LITERATURE.

Compliments of the season come on a tastily designed card from the L. & I. J. White Co., Buffalo, N. Y. It presents a

A handy desk blotter pad is the holiday souvenir sent out by the Monroe Screen, Blind & Partition Co., Lima, Ohlo. attractive products are turned out by this concern, and are usually found in the wellappointed residence.

Excelsior self-vulcanizing packing, as made by the Boston Belting Co., Boston, Mass., is described in a folder sent out by that concern. It is considered particularly well adapted for packing expansion or heated joints, as it does not burn or char.

"Hoo-Hoo" babbitt metal is the perfection of twenty-five years' experience. A circular sent out by the manufacturers describes this We are informed that there is product. absolutely not an ounce of lead used in its mixture. It is stated that there is not one particle of dross in the pouring of this metal. This advantage will readily be appreciated by the user. Filling evenly the smallest as well as the largest space, it is said that nearly one-third less quantity is required. Nickel being one of its component parts, the claim of the manufacturers is that it has a metal that will resist more friction and stand more weight per inch of babbitted surface than anything yet offered.' most delicately constructed machinery, as well as the heaviest and most powerful in the world, will, it is claimed, run smoothly and safely when babbitted with "Hoo-Hoo" metal. This metal is placed before the consumer at an established price, or one price alike to all users. More, Jones & Co., St. Louis, Mo., are the manufacturers. The selling agents include many well-known firms. Among them are Thos. C. Basshor & Co., Baltimore, Md.; Fairbanks Co., New Orleans, La.; C. E. Atkins & Co., Memphis and Chattanooga, Tenn.; Henry Walke, Norfolk, Va.; Palmer Hardware Co., Savannah, Ga.; Queen City Supply Co., Cincinnati, Ohio; Samuel Harris & Co., Chicago, Ill.; Strong, Carlisle & Turney Co., Cleveland, Ohio; Beals & Co., Buffalo, N. Y.

Attractive Calendars.

Elegance and good taste are shown in the calendars issued for the new year.

From George C. Wedderburn, agent of the National Life Insurance Co., Montpeller, Vt., comes a reproduction of the painting, "The Meeting of the Tribes." The Rock of Dunder, in Lake Champlain, stands out prominently in the picture.

Washington Coal & Coke Co., Dawson,

send out an attractive example.

A jolly group of Brownies forms a picture in colors that emphasizes the good points of the Meyers pumps and hay tools, made by F. E. Meyers & Bro., Ashland, Ohio. The calendar also shows views of the sprinklers, pumps, etc., made by this concern.

A Chickasaw Indian in picturesque costume is the central figure in a picture of commerce and industry, and calls attention to the architectural iron work, presses, boilers, engines, etc., made by the Chickasaw Iron Works, Memphis, Tenn.

The Ashton Valve Co., 271 Franklin street. Boston, Mass., sends out a cute picture of a country road, flowing water and two wide awake boys, from one of whom comes the remark, "It's a go, sure pop." The subject is an appropriate one, as the popularity of Ashton valves clearly shows that they are a "go."

A cute conceit entitled "Reading the News" ornaments a calendar issued by the United States Fidelity & Guaranty Co., Baltimore. The picture shows three cats mixed up with a newspaper. This engraving is executed in a realistic style.

The sixty-fifth year of Robinson oils is noted on a calendar from William C. Robinson & Son, Baltimore. This great record is worthy of commemoration, and the success of these products through such a long period is due to the progressive policy of the manufacturers. Aiming to lead, they have developed their goods to a high degree of perfection, and enjoy the confidence of an extensive trade.

Views of the historic old Statehouse and the present city hall at Philadelphia are displayed on a calendar from the Keystone Engine and Machine Works, Philadelphia. Pa. The old Liberty bell and William Penn occupy positions of prominence. Attention is called to the engineering specialties for which this concern is noted.

Mr. E. G. Trenholm, of Savannah, has been appointed superintendent of the Board of Trade of the city, succeeding C. W. Saussy, who has resigned.

Information has been received in New Orleans of the discovery of deposits of sulphur and salt in St. Mary's parish, at what is known as Belle Isle. It is stated that the sulphur exists much nearer the surface than the deposit in Calcasieu parish, now controlled by the Standard Oil Co.

The British steamship Maroa cleared from Brunswick, Ga., on the 31st ult. for Liverpool with the largest cargo that ever left the port. The cargo was loaded by the Brunswick Terminal Co., and consisted of 19,574 bales of cotton, 1750 tons of pig iron and 350 tons of cottonseed, the whole being valued at \$664,601.

Legends of the Rhine. By H. A. Guerber. 488 pages. Illustrated. Price \$2. A. S. Barnes, publisher, 156 Fifth avenue, New York city.

A contribution to the study of folklore, this book is both useful and charming. As a legendary guide to the Rhine, it brings to the traveler delightful fancies about this matchless river. The wealth of romantic story and picturesque ruins afford many interesting anecdotes. To everybody who has visited the Rhine region, and those intending such a tour, the mythical and legendary stories given by this book, as well as the knowledge of the locations, makes it a desirable companion. The labor, care, good judgment and literary taste displayed add to its

The Chicago Daily News Almanac and Political Register has steadily grown in value and interest since its first issue in 1885. The present issue for 1897 is one of the most valuable annuals for the American citizen of which we have any knowledge. It shows the growth and extent of our trade and commerce; the development of public and technical schools, colleges and universities; the intricate workings of our financial system; the products of agriculture and their value; the foreign complications in which the United States is now or is soon likely to become involved; the debts and rate of taxation in the various States and cities of the Union; the growth of the churches and of the young people's societies connected therewith; the progress of foreign immigration, the States to which these immigrants have gone, their and the brought with them, etc.

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Modern Marine Machinery. Complete outfits in either single or twin screw, side or stern paddle wheel machinery, built by Marine Iron Works, No. 9 Dominick street, Chicago. Catalog free,

Reduced Rates to Washington on Account of the Inauguration via Pennsylvania Railroad.

For the benefit of those who desire to attend the ceremonies incident to the in- Street Station, Philadelphia.

auguration of President-elect McKinley, the Pennsylvania Railroad Co. will sell excursion tickets to Washington, March 1, 2, 3 and 4, valid to return from March 4 to 8, at the following rates: From New York, \$\$; Philadelphia, \$5.40; Baltimore, \$1.60; Harrisburg, \$5.06; Williamsport, \$8.79; Buffalo, \$11.20; Rochester, \$10.48; Altoona and Pittsburg, \$10, and from all other stations on the Pennsylvania system at reduced rates.

This inauguration will be a most interesting event, and will undoubtedly attract a large number of people from every section of the country.

The magnificent facilities of the Pennsylvania Railroad make this line the favorite route to the national capital at all times, and its enormous equipment splendid terminal advantages at

on such occasions.

Two Weeks in Florida.

Washington make it especially popular

To see Florida is a pleasure, to visit it is a privilege, but to spend a fortnight within its borders is an epoch. There is a great satisfaction in witnessing the ripening of tropical fruits in their own native land, and a peculiar joy in wrestling with old ocean's waves when lakes and rivers at home are all ice-bound. One appreciates the wonders of modern invention and railroad development upon leaving the neighborhood of good skating one day and finding himself in the vicinity of good bathing the next. Yet this can be done, and the man who prefers hunting or fishing will take his accourrements along with him, for Florida extends a cordial invitation to all sportsmen.

Whoever would exchange for two weeks the uncertain climate of the North for the delightful and spring-like sun-shine of Florida should take the personally-conducted Jacksonville tour of the Pennsylvania Railroad, which leaves New York by special train January 26. Excursion tickets for this tour, including railway transportation, Pullman accommodations (one berth) and meals en route in both directions while traveling on the special train, will be sold at the follow-ing rates: New York, \$50; Philadelphia, \$48; Canandaigua, \$52.85; Erie, \$54.85; Wilkesbarre, \$50.35; Pittsburg, \$53, and at proportionate rates from other points.

For tickets, itineraries and other information, apply to ticket agents, tourist agent at 1196 Broadway, New York, or to George W. Boyd, assistant general passenger agent, Broad Street Station,

Philadelphia.

Tours to Florida.

No district in America presents during the winter season so many varied attractions as the State of Florida. Besides its delightful climate, which to one escaping from the cold and unhealthful changes of the North seems almost ethereal, it is pre-eminently a land of sport and pleasure. Along its 1100 miles of salt-water coast and in its 1200 freshwater lakes are fish of almost every con-ceivable variety, from the migratory tribes common to Northern waters to the tarpon, pompano and others of a more tropical character. Nowhere in all our broad land can the angler find a greater variety of game or better sport,

Here also the most enthusiastic hunter finds satiety. Deer, turkeys, bears, panthers and wild cats roam at large through the more sparsely settled regions, while birds of all kinds may be found in abundance throughout the State. The more novel sport of alligator and manatee hunting may also be indulged in by the more adventurous tourist.

With its matchless climate, its orange groves, its rivers and lakes, its boating and bathing, its fishing and hunting, and its extensive forests, Florida presents unrivaled attractions for the valetudinarian, the lover of nature, the sportsman and the explorer.

To this attractive State the Pennsylvania Railroad Co. has arranged four personally-conducted tours during the season of 1897, leaving by special train January 26, February 9 and 23, and March 9. The first three tours will admit of a sojourn of two weeks in this delightful land; tickets for the fourth tour will be valid to return until May 31 by regular trains.

Rates for the round trip, \$50 from New York, \$48 from Philadelphia, and proportionate rates from other points.

For tickets, itineraries and other information, apply to ticket agents, special booking offices, or address Geo. W. Boyd. assistant general passenger agent, Broad

FINANCIAL NEWS.

The Manufacturers' Record invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

No advertisements but those of a financial character will be accepted for the following

DIVIDENDS AND INTEREST.

Disbursements of Municipal, Financial, Railroad and Industrial Corporations in the South.

In this issue the Manufacturers' Record presents a list, cor. cted to date, of the January dividend and interest disbursements of Southern financial, industrial, municipal and railway corporations. While the amount cannot be exactly calculated at present, it is believed that it is fully as large as that paid in January, 1896, and there is reason to believe that it may possibly exceed that sum.

The banks, as a rule, have declared as large if not larger dividends for the halfyear of 1896, while, in spite of the general business depression, railroad and other corporations in the South have met their interest payments promptly.

DIVIDENDS.

Baltimore, Md.-Western National Bank, 4 per cent., semi-annual; Cumberland & Elk Lick Coal Co., \$1.50 per share; Merchants & Manufacturers' Fire Insurance Co., 4 per cent., semi-annual; Commercial and Farmers' National Bank, 3 per cent., semi-annual; American National Bank, 2 per cent., semi-annual; German American Bank, 2½ per cent., semi-annual; Maryland Fire Insurance Co., 3 per cent., semi-annual; Merchants' National Bank, 4 per cent., semi-annual; Traders' National Bank, 3 per cent., semiannual: Border State Savings Bank, 1 per cent., extra; National Bank of Commerce, 2½ per cent., semi-annual; Citizens' National Bank, 5 per cent., semi-annual; Canton National Bank, 2 per cent., semi-annual; Drovers and Mechanics' Bank, 3 per cent., semi-annual; Baltimore & Reisterstown Turnpike Co., 2 per cent., semi-annual; Manufacturers' National Bank, 21/2 per cent. semi-annual; Home Building and Loan Association, 3 per cent., semi-annual; German Fire Insurance Co., 5 per cent., semi-annual; Associated Firemen's Insurance Co., 4 per cent., semi-annual; Maryland Coal Co., 21/2 per cent.

New Orleans, La.-Metropolitan Bank, 4 per cent., semi-annual; New Orleans Insurarce Association, 3 per cent., semi-annual; New Orleans & Carrollton Rallroad Co., \$1.50 per share, quarterly; Merchants' Insurance Co., 4 per cent., semi-annual; Teutonia Savings Bank, 3 per cent., semi-annual; Whitney National Bank, 4 per cent. semi-annual; Jefferson City Gas Light Co., \$2.50 per share; Union Homestead Association, 5 per cent.; New South Building and Loan Association, 5 per cent., semi-annual; New Orleans City & Lake Railroad Co., 4 per cent.; Crescent City Railroad Co., 3 per cent.; Louisiana National Bank, \$4 per semi-annual; Germania Bank, \$3 per share, semi-annual; Hibernia National Bank, \$5 per share, semi-annual; Canal Bank, \$3 per share, semi-annual; Germania Savings Bank, \$8 per share, semiannual; New Orleans National Bank, \$15 per share, semi-annual.

Richmond, Va.-Virginia Fire & Marine Insurance Co., 4 per cent., semi-annual; American Home Building and Loan Association, 4 per cent., semi-annual; Merchants & Mechanics' Building Fund Co., 31/2 per cent., semi-annual; Virginia Building & Loan Co. 31/2 per cent., semi-annual; Richmond Building, Loan & Trust Co., 2 per cent., semi-annual; First National Bank, 5 per cent., semi-annual; Guarantee Building, Loan & Trust Co., 21/2 per cent., semi-annual; Virginia-Carolina Chemical Co., quarterly dividend; Old Dominion Building and Loan Association, 3 per cent., semi-annual; Home Building Co., 2½ per cent., semi-annual; National Bank of Virginia, 3 per cent.; Commercial Building and Loan Association, 31/2 per cent., semi-annual; Building, Loan & Trust Co. of Manchester, Va., 4 per cent., semi-annual.

Louisville, Ky.-German Bank, 6 per cent., semi-annual; Western Insurance Co., 5 per cent., semi-annual; Western Bank, 3 per cent., semi-annual; German Security Bank, 4 per cent., semi-annual; Kentucky Heating Co., 3 per cent., semi-annual; Third National Bank, 3 per cent., semi-annual; Farmers

and Drovers' Bank, 11/2 per cent., quarterly; Union National Bank, 3 per cent., semiannual; Bank of Commerce, 5 per cent., semi-annual; German Insurance Co., 5 per cent., semi-annual; Louisville Public Warehouse Co., 4 per cent., semi-annual; Louis-ville Trust Co., 2 per cent., quarterly; Columbia Finance & Trust Co., 2 per cent., quarterly; Kentucky Title Co., 3 per cent., semi-annual; Equitable Building Association. 4 per cent., semi-annual.

Charleston, S. C .- Miners and Merchants' Bank, \$3.50 per share, semi-annual; Enterprise Bank, 3 per cent., semi-annual; Columbian Banking & Trust Co., 6 per cent., semi-annual; Bank of Charleston, cent., semi-annual; People's National Bank. \$5 per share; Charleston City Railway Co., \$1.50 per share; American Savings Bank, 10 per cent.; Dime Savings Bank, \$5 per share, semi-annual; Palmetto Soap Manufacturing Co., \$1.50 per share; Equitable Fire Insurance Co., 3½ per cent., semi-annual; First National Bank, \$6 per share, semiannual; Charleston Gas Light Co., seventyfive cents per share.

Greenville, S. C .- Pledmont Manufacturing Co., 5 per cent.; Pelzer Manufacturing Co., 5 per cent.; People's Bank, 4 per cent.; City National Bank, 31/2 per cent.; American Bank, 31/2 per cent.; National Bank of Greenville, 4 per cent.; Greenville Ferti-

lizer Co., 5 per cent.

Savannah, Ga. - National Bank of Savannah, \$3.50 per share, semi-annual; Chatham Real Estate & Improvement Co., \$1.75 per share: Southern Bank of State of Georgia, 4 per cent., semi-annual; Merchants' National Bank, \$2 per share, semi-annual; Germania Bank. \$3 per share, semi-annual; Brush Electric Light Co., \$3 per share, semiannual; Savannah Banking & Trust Co., \$3 per share, semi-annual.

St. Louis, Mo.-North Western Savings Bank, 4 per sent., semi-annual; Bremen Bank, \$4 per share, semi-annual; German-American Bank, \$6 per share, semi-annual.

Salem, Va.-Farmers' National Bank, 31/2 per cent., semi-annual; Salem Loan & Trust Co., 21/2 per cent., semi-annual; Bank of Salem, 4 per cent.; Comas Machine Co., 5 per cent., quarterly.

Lynchburg, Va.-First National Bank, 3 per cent., semi-annual; People's National Bank, 5 per cent., semi-annual; National Exchange Bank, 3 per cent., semi-annual; Commercial Bank, 3 per cent., semi-annual: Lynchburg National Bank, 5 per cent., semi-

Wytheville, Va.-Bank of Wytheville, 4 per cent., semi-annual; Farmers' Bank, 3 per cent., semi-annual; Wytheville Building and Loan Association, 4 per cent., semiannual.

Petersburg, Va.-Petersburg Gas Co., 4 per cent.; Petersburg Building & Loan Co., 3½ per cent., semi-annual; Mutual Telephone Co., 3 per cent., semi-annual; National Bank,

4 per cent., semi-annual. Charlotte, N. C. — Commercial National Bank, 5 per cent., semi-annual; First National Bank, \$5 per share.

Washington, D. C .- Norfolk & Washington Steamboat Co., 3 per cent.; Washington Market Co., forty cents per share.

New Berne, N. C.-National Bank, 5 per cent., semi-annual.

Wilmington, N. C.-National Bank, 3 per cent., semi-annual. Columbia, S. C.-Loan and Exchange Bank.

4 per cent. Portsmouth, Va. - Portsmouth Insurance

Co., 5 per cent., semi-annual. Augusta, Ga.-John P. King Manufactur-

ing Co., 3 per cent., semi-annual; Granite-ville Manufacturing Co., 5 per cent., semiannual; Enterprise Factory, 3 per cent., semi-annual.

Columbus, Ga.-Fourth National Bank, 3 per cent., semi-annual. Americus, Ga.-Sumter Real Estate Co.,

40 per cent. Little Rock, Ark.-German National Bank,

2½ per cent., semi-annual. Mobile, Λia.—People's Bank, 6 per cent., semi-annual; First National Bank, 6 per cent., semi-annual.

Montgomery, Ala.-Bank of Montgomery, 3 per cent., semi-annual; First National Bank, 3 per cent., semi-annual; Merchants and Planters' National Bank, 4 per cent., semi-annual; Farley National Bank, 3 per

cent., semi-annual. Galveston, Texas.-Improvement & Loan Co., \$4 per share, semi-annual; Texas Guarantee & Trust Co., 4 per cent., semi-annual; Savings & Loan Co., 4 per cent., semiannual.

Dallas, Texas.-American National Bank,

6 per cent., semi-ann ial. Staunton, Va.-National Building & Loan Co., 4 per cent., semi-annual.

Jackson, Miss.--First National Bank, 15 per cent. Cumberland, Md.-First National Bank, 5

per cent., semi-annual.

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Fort Worth, Texas.—Texas & Pacific Coal Co., 1 per cent.

Railroad Dividends:

Texas Central, 3 per cent., annual. Annapolis, Washington & Baltimore, 21/2 per cent.

Augusta & Savannah, 21/2 per cent. Illinois Central (leased lines), 2 per cent. South Carolina & Georgia, 21/2 per cent. Northern Central, 4 per cent., semiannual.

Mississippi Valley, 2 per cent. Northeastern of South Carolina, 3 per cent. North Carolina, 3 per cent. Wilmington, Columbia & A., 3 per cent.

RAILROAD BOND INTEREST.

Aberdeen & W. E. 1st mort. 5s. Alabama Great Southern 1st mort. 6s. Arkansas & Louisiana 1st 5s. Arkansas Midland 1st 6s. Asheville & Spartan. 4s. Atlanta & Charlotte 7s. Atlantic & N. C. 1st 6s. Atlantic & Danville 1st 5s. Austin & Northwestern 5s. Baltimore & Annapolis 1st 4s. Baltimore & Potomac 1st m. 6s, consol. 5s. Balto. & Ohio Southwest. 7s, 41/2s, O. & Miss. 7s and 6s, B. & O. S. W. con. 41/2s. Carolina Central 1st 6s. Cen. of Ga. R. R., Mobile 5s, M. & N. 5s,

Ocean S. S. Co. 6s. Cent. of S. C. 1st 6s. Charleston & Savannah gen. mort. 7s. Ches. & Ohio purchase 4s, 2s, Craig Val. 5s.

Ches., Ohio & Southwest. equip. trust 6s. Chic., Pad. & Memp. 1st 5s. Florida Central & Pen. 1st 5s, consol. 5s, land grant 5s.

Florida Southern 1st 31/2s Fort Worth & Rio Grande 1st 5s. Gal. Har. & San An. W. div. 2d m. 6s. Georgia & Alabama 1st 5s. Georgia, Car. & North. 1st 5s. Georgia Midland & Gulf 1st 4s. Ga. R. R. & Banking Co. plain bds. 6s, 5s Georgia Southern & Florida 1st 5s. Houston & Texas Cent. 1st m. l. g. 5s. Illinois Central mort. bonds 4s, 31/2s, trust

31/2s, Col. Tr. 4s. Knox. & Ohio 1st 6s. Louisiana Western 1st. m. g. 6s. Louis., Henderson & St. Louis 1st 5s. Louis. & Nash. N. O. & M. 1st m. 6s, 2d 6s, unif. 4s, L., C. & L. 7s, Kent. Cen. 7s, new 4s. Memphis & Charleston 1st 7s, 2d 7s, con.

7s, gen. m. 6s, 1st 4s. Little Rock & Ft. Smith 1st. m. l. g. 7s. Kan. & Ark. Val. 1st 5s. Mobile & Ohio exten. 1st m. 6s, g. m. 5s.

Morgan's La. & T., Alx. ext. 1st m. 6s. Nash., Chat. & St. L. 1st m. 7s coup., 2d 6s, Jasper div. 8s, Tenn. C. & I. Co. 6s. Nashville & Decatur 1st guar. 7s. New Orleans & North East. 1st 6s. Raleigh & Augusta 1st m. 6s. Raleigh & Gaston 1st m. 8s. Rich., York Riv. & Ches. 1st m. 8 Rich., Fred. & Poto. dollar loan 5s, 6s and

Sav., Fla. & West., Bruns. & W. 1st 4s, 7s. Seaboard & Roanoke mort. 5s.

7s, coupon 5s.

Southern Railroad Co.-Col. & Green 1st 5s; Char., Col. & Aug. 1st 5s; Ga. Pac. 1st 5s; Rich. & Dan. con. 6s; Rich., Y. Riv. & Chi. 1st 5s; West. N. C. 1st 6s; East Tenn., Va. & Ga. old 1st 7s; East Tenn., Va. & Ga. div. 1st; Atlanta Central 1st 6s; Spart., Union & Co. 1st 4s; Charl. & Rep. 1st 6s; Atl. & Char. 1st 7s; Knox. & Ohio 1st 6s.

Texas & New Orleans con. 5s. W. Va. Cent. & Pitts, 1st 6s. West. Maryland end. 3d. m. 6s, 4th 6s, 5th

31/4s, pref. 6s, city of Balto. loan, B. & C. 6s. Portsmouth Street Ry. & Light Co. Northeastern R. R. of S. Ca. consols. Balto. Traction Co. 5s.

Tenn. Coal, Iron & R. Co., Birm. div.

Baltimore-City Hall 6s 1900; Funding 6s; Consolidated 31/2s; Patterson Park 4s; Publle Improvements 3½s; Harford Run Imp.; Consolidated Gas Co.; Coup. Brush Elec. 1st and Gen.; Coup. Best Tel. Co. 5s; College of Physicians and Surgeons 6s; National Brewing Co. 1st 6s; Potomac Coal Co.; Union Mining Co.; Russell Creek Coal Co.; Clare-Abattoir Co.: Union Tunnel Co.

MISCELLANEOUS INTEREST.

Charleston, S. C .- City of Charleston 4 per cent. bonds; Charleston City R. W. Co. coupon bonds; Charleston Hotel Co. coupon

Galveston, Texas.-Galveston Cotton Mill bonds.

Pensacola Water Co.; Cuthbert, Ga., Water Works; Richmond, Ky., School; Elyton (Ala.) Co. 5s; Dallas, Texas, Com.; Portsmouth Ry. & Light Co.; Peace River Phosphate Co.; Florida Publishing Co.; Rome, Ga., Com.; Town of Wytheville (Va.) Electric Plant 6s; Columbus (Ga.) Water 1st 6s: Salisbury (N. C.) Water Co. 5s: Raleigh. N. C., 5s; Radford, Va., 6s; Shreveport (La.)

Light & Power Co. 7s; Asheville, N. C., 5s and 6s; Petersburg, Va., 5s; Charlottesville, Va., 5s; Staunton, Va., 5s; Annapolis (Md.) Water Co.; Portsmouth & Suffolk (Va.) Water Works; Galveston, Texas; Heard County, Georgia; Elbert County, Georgia; Temple, Texas, Water; Texarkana Water; Colbert County, Alabama, Road: Cartersville, Ga., Water; Charleston, W. Va., Water; Sparta, Ga., School; Spaulding County, Georgia, Imp.; New Orleans City 4s.

Saving in Small Sums.

A plan for saving money in small amounts is being carried on successfully in Sumter, S. C. What is termed a mutual savings association is formed. Each member of the fund agrees to pay at the Bank of Sumter ten cents per share per week, and failure to do so before the close of banking hours subjects the delinquent to a fine of five cents per share. Should a stockholder neglect or refuse to pay assessments and fines, the stock standing in his name is converted into the general fund and the remaining stockholders are thereby benefited.

There is no expense attached to the management of the funds, as the weekly payments are deposited directly in the savings department and the bank pays the usual interest on them. The stock is held, as a rule, in blocks varying from ten to fifty shares, but by far the greater number of members have only ten shares.

It is estimated that each stockholder receives not only the par value of his stock, but a dividend of about 5 per cent., which is derived from the interest from the savings bank and fines paid by delinquent members.

A Georgia Bank Scheme.

The banks comprised in the Georgia Bankers' Association have decided to issue what are known as circular checks for the benefit of customers who wish to transmit funds from one town to another. The circular checks which the banks propose to issue and sell their customers will be based on the principle of New York exchange, and will be made payable in New York at any time within ninety days from the date of the check, but the feature of the check will be that it will be payable on presentation by any bank which is a member of the association within sixty days after date. In the event the check should be lost by the purchaser, the bank will issue its duplicate after sixty-five days, as the original will become void by expiration of limitation at the end of sixty days.

The checks will be issued by all the banks belonging to the association, and will be charged for at about the same rates as postoffice and express money orders are now selling. The check has been prepared by a committee appointed at the last session of the association, and has been copyrighted. It will be printed on sea-green paper, with the water marks of the association in the paper.

One of the reasons for this method is the great increase in postoffice and express money orders, all of which business the bankers think should rightfully go to

Prosperous Baltimore Savings Banks.

Reports made by the savings banks of Baltimore show that during the year 1896 these institutions maintained their high reputation for careful management. The savings institutions of this community are known throughout the country for the sound financial basis upon which they are established. A number of the annual reports which appear in the present issue of the Manufacturers' Record verify this beyond a doubt.

The Savings Bank of Baltimore, according to the report of the board of auditors who examined its accounts, is have bought \$127,300 vorth of Louisville

the repository of over \$20,000,000 of funds. While it received from the depositors alone during 1896 \$3,245,798, its investments are of such a character that it also received nearly \$1,000,000 in dividends from stocks and interest on loans. This is one of the largest savings enterprises in the United States.

The Hopkins Place Savings Bank, which is located in the wholesale part of the city, is another prosperous institution. Its report, recently audited, shows that it has over 10,000 depositors, and that over 2500 new accounts were opened during the year, or above 25 per cent. of the entire number. The amount of funds in this bank on January 1 was \$2.849,-066. During 1896 there was received from depositors \$1,575,144, or over 50 per cent, of the total amount of funds on hand on January 1, 1896.

The German Savings Bank of Baltimore, which is located in the western portion of the business section, is largely patronized, not only by Germans, but by other depositors. The committee appointed to audit its accounts reports that "this bank has been economically and judiciously managed." It has over 4000 depositors and nearly \$2,000,000 on hand, as shown by its statement for the year ending December 31.

The Provident Savings Bank is a great benefit to the working classes, and has a number of branches throughout the city, which are a convenience to these depositors. Its accounts were audited by a committee consisting of Messrs. David Ambach, H. Irvine Keyser and Miles White, Jr., all well-known residents of Baltimore, and their report is very satisfactory. This bank also has a very large number of depositors-21,000-and as an indication of the amount of new business it is securing, it may be stated that 4900 new accounts were opened during 1896.

The Metropolitan Savings Bank is one of the oldest and most substantial in the city. It has over 4000 accounts, and judging by the report of the auditing committee, it is in an excellent condition. The committee states that the funds are invested in loans and real es tate, stocks and bonds, and are abundantly secured, as the securities are of the most substantial character. The las investigation of the affairs of this institution was made by a committee not con nected with the corporation in any way and consisted of Messrs. E. Austin Jen kins, Allan McSherry and B. F. New comer, all of whom are gentlemen of the highest standing in the community.

New Corporations.

The Home Building and Loan Associa tion has been formed at Charleston, S.C. by R. G. Hubbard and others.

The Mechanics & Traders' Town Mu tual Fire Insurance Co. has been forme at Kansas City by B. F. Burd and other

The Texas Mutual Building and Loan Association, of Waxahachie, Ellis county, has been formed, with capital stock of \$1000. This corporation is formed for the purpose of doing a general building and loan business; incorporators, B. Helman, W. H. Fears, Charles C. Crocker and John P. Cooper.

The Northern Building and Loan Association has been chartered at Roanoke. Va., with \$100,000 capital and the following officers: President, W. A. Beach; vice-president, John H. Hoxsie; secretary, J. B. Sproles; treasurer, E. P. Chapman, Jr.; attorney, Charles Griffin, all of New York. These officers also constitute the board of directors.

New Securities.

Estabrook & Co., of Boston, Mass.,

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5 per cent. bonds at 31/8 per cent. pre-

The Wadesboro (N. C.) Cotton Mills Co. has authorized its directors to issue \$40,000 in funding bonds at 6 per cent.

The proposed bond issue to be made by the city of Athens, Ala., will be \$15,000, to bear 6 per cent. interest. Mayor T. C. McLellan will receive bids until February 1.

Financial Notes.

The Bank of Waycross, Ga., has added \$1000 to its surplus.

John Trimble has been appointed vicepresident of the Catlettsburg (Ky.) National Bank.

Among the directors of the Pleasants County Bank, recently formed at St.

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Mary's, W. Va., are A. S. Grimm and J. Q. Reynolds.

O. J. Kendall has been appointed vicepresident of the City National Bank of Wichita Falls, Texas, and P. P. Langford, cashier.

J. W. Cabaniss has been elected president of the Exchange Bank of Macon, Ga., succeeding Henry J. Lamar, deceased. S. S. Dunlap has been chosen vice-president, and C. M. Orr, cashier.

The United States Fidelity and Guaranty Co. of Baltimore has issued a handsome prospectus, giving illustrations of its building and outlining the purposes of the company. This corporation has a capital of \$500,000, and is composed of some of the wealthiest and most influential citizens of Baltimore.

The series of locks on the Rough river, in Kentucky, has been completed by the government, and the stream is now open for navigation from Livermore, in Green county, to Hartford, in Ohio county.

J. N. Carpentier, of Newport News, Va., has invented a safety valve that is attracting much attention from naval experts. It works automatically, and is intended to prevent damage and loss of life so frequently caused by the bursting of steam pipes on vessels. It will shut off the steam from the boiler as soon as a

Mercantile Trust & Deposit Co.

OF BALTIMORE.

Paid-up Capital, \$1,000,000.
Surplus, \$1,000,000.

DEPOSITS RECEIVED
On which interest is allowed, governed by current rates obtainable.

rent rates obtainable.

TRUSTEES AND ADMINISTRATORS.
This company is a Legal Depository for funds in the hands of Trustees or Administrators, and allows interest on some pending distribution.

Authorized to act as Executor, Administrator, Gu rdas, Receiver or Trustee.

ACTS as Trussee of Mortgages of Corporations and accepts Transfer Agency and Registry of Stocks.

Safe Deposit Boxes for Rent.

Vaults supplied for Storage of Silver Chests, etc.

JOHN GILL, of R., President.

SURETY BONDS OF EVERY KIND. American Bonding & Trust Co.

OF BALTIMORE CITY,

Equitable Building, Baltimore.

Capital, fully paid, - - \$500,000 Stockholders' Liability, - 500,000

John K. Cowen,

John K. Cowen,

John T. Stone,
John K. Cowen,
John K. Cowen,

Gives security for Executors, Administrators, Trustees, Receivers, officers of Banks, Corpora-tions, Lodges and Societies, Contractors, Clerks, Messengers, Conductors, Motormen, and all other employees, e[†]c.

GUARANTEES THE FULFILMENT OF CONTRACTS.

Fidelity and Judicial Bonds of every kind Issued by

The United States Fideli'y and GUATANTEE CO. OF BALTIMORE.

SOLICITS YOUR PATRONAGE.

Office, CALVERT AND GERMAN STREETS.
Telephone 268.

Telephone 268.

Bonds furnished Offi ers and Employes of Mercantile Houses, Banks, Railroads, Express and Telegraph Companies,
Officials of States. Cities and Counties. Becomes Sure y on Bonds of Guardians. Assign es, Executors, Trustees, Repleviu, Injunctions, Administrators, Receivers, Attachment, and all undertakings in Judicial Proceedings in State and United States Courts. Does not act as Executor, Administrator or Trustee. Patronage of Lawyers specially solicited and special rates given.

\$500,000 on

STOCKHOLDERS' LIABILITY..... 5500,000 00

TOCKHOLDERS' LIABILITY..... 500,000.00

TO FAL RESOURCES.... \$1,000,000.00

HON FRANK BKOWN, President. Governor of var land from 1812 to 1896.

JOHN R. BLAND, Vice Pres. and Gen Manager.

J. KEMP BARTLETT, JR. Second Vice-Pres. ALEXANDER PAYSON KNAPP, Secretary. TOWNSEND SCOIT, Treasurer.

HON. I IDOR KAYNER General Counsel. MARTIN LEHMAYER.

WILLIAM B. RAYNER, Assistant Counsel.

J. WM. MIDDENDORF.

Members Baltimore Stock Exchange.

WM. B. OLIVER.

MIDDENDORF, OLIVER & CO. BANKERS AND BROKERS.

No. 213 E. Gorman Street, [ENYSER BUILDING.] Baitimore, Md. Stocks and Bonds Bought and Sold on Commission. Special attention given to Municipal and other Investment Loans. Dealers in Foreign Exchange. Drafts on Europe and Letters of Credit furnished.

SPERRY, JONES & CO.

DEALERS IN Southern Investment Securities,

239 East German Street, Baltimore, Md.

OUR FACILITIES ARE UNEXCELLED.

MARYLAND TRUST CO

Corner South and German Sts BALTIMORE.

CAPITAL, \$1,000,000.

A LEGAL DEPOSITORY FOR COURT AND TRUST FUNDS.

Acts as Financial Agent for States, Cities, Towns, Railroads and other Corporations Transacts a general trust business. Lends money on approved security. Allows interest on special deposits. Acts as Trustee under Mortgages, Assignments and Deeds of Trust; as Agent for the Transfer or Registration of Stocks and Bonds, and for the payment of coupons, interest and dividends.

J. WILLCOX BROWN, PRESIDENT. LLOYD L JACKSON, FIRST VICE-PREST. HENRY J BOWDOIN, SECOND VICE-PREST. J. BERNARD SCOTT, Secretary and Treasurer.

DIRECTORS-J. Willcox Brown, Wm. A. Marburg, Basil B. Gordon, Lloyd L. Jackson, Fred. M. Colston, Fred. M. Colston,
H. J. Bowdoin,
Joshua Levering,
Frank Brown,
W. B. Brooks, Jr,
W. H Baldwin,
Fredk W Wood,
F M Thieriot,

CORBLeopold Strouse,
Henry Walters,
H. A. Parr,
B. N. Baker,
Andrew D Jones,
James Bend,
Alexander Brown,
T. K. Worthington,
Clayton C. Hall,
L. D. Raker, Clayton C. Hall, J. D. Baker, F. S. Bangs, John R. Garrett.

WOULDN'T YOU LIKE TO OWN AN INTEREST IN *A GOLD MINE?*

Suppose you write for particulars about

THE BIG UNION MINING CO

This company owns and is now opening up rich gold mines in the famous Leadville Gold Belt of Colorado. The officers and stockholders of the company are not speculators but are well-known conservative business mem. Here are some of them;

OFFICERS. OFFICERS,
R. E. LYON, President,
STEPHEN H. EMMENS, Vice-President,
L. L. POWELL, Secretary,
H. B. Tilden, Tressurer.
ARCHIBALD H. TAYLOR, Gen'l Counsel.

DIRECTORS.

B. L. Duke, the great tobacco manufacturer Durham, N. C.
W. T. O'Brien. of the American Tobacco Co., Durham, N. C.
Stephen H. Emmens, Prest. of the Mining and Industrial Exchange, New York City.
R. E. Lyon, of Baltimore, Md.
Geo. C. Schuermann, of Battimore, Md.
L. D Heartt, Cashier First Nat'l B'k Durham, N. C.
H. B. Tilden, of Baltimore, Md.
The stock of this comeany, has been listed on

The stock of this company has been listed on the New York Mining and Industrial Exchange. The office of the company is at 849 Equitable Building, Baltimore, Md.

Building, Baltimore, Md.

The treasury stock now being offered affords an investment opportunity that is well worth looking into.

The Big Union Mines, the property of this compiny, lie on the same contact vien with the most noted of the great! eadville mines. One of these the "Little Johnny" is the greatest gold mine in Colorado and perhaps in the world. Its present output is about \$200,000 per month. It paid last vear \$1.600,000 in dividends and is now paying monthly dividends of \$100,000 to \$200,000.

CENTRAL SAVINGS BANK

BANK STATEMENTS.

OF BALTIMORE,

S. E Cor. Charles and Lexington Sts.

ANNUAL STATEMENT.

BALTIMORE, December 31, 1896. Funds on hand Pecember 31, 1895....\$4,750,307 53
Re-eived from depositors
during 1°96...........\$2,183,075 09
Received from interest on
loans and dividends on
stocks and bonds dur-

226,958 16 2,410,033 25

Paid depositors during 1896\$2,142,337 77
Paid expenses during 1896
Paid taxes during 1896
Paid p emiums on bonds
bought, &c., during 1896
30,344 06

Funds on hand December 31, 1896. \$4,953,506 17

THE SAVINGS BANK OF BALTIMORE.

JANUARY 1, 1897.

The undersigned, appointed by the Board of Directors of The Savings Bank f Baltimore to audit a statement of its operations for the past year and to report thereon, have carefully performed the duty assigned, and report as follows:

\$24,894,503 00

3,742,681 99

FRANK N. HOEN, WM. B. WILLSON, JOHN PLEASANTS.

HOPKINS PLACE SAVINGS BANK.

No. 7 HOPKINS PLACE.

ANNUAL STATEMENT.

BALTIMORE, January 1, 1897.

Amount of funds January 1, 1896....\$2,609,175 99

Received from depositors during the

\$4,318,450 99 1,469,384 98 Amount of funds January 1, 1897 \$2,849,c66 of

WM. A. TOTTLE, ALFRED S. NILES.

BANK STATEMENTS.

METROPOLITAN SAVINGS BANK OF BALTIMORE

125 605 93

Leaving funds December 1, 1896....\$2,189,604 33 Leaving funds December 1, 1896....\$2,189,604 32
The funds are invested in loans on real estate, stocks and bonds, in the opinion of the undersig ed abundantly secured, and in the purchase of stocks and bonds of the most substantial character. The stocks and bonds purchased are all held below their market value, and none above their par value.

There were open December 1, 1895, 4,145 accounts; there were spened during past year 799 accounts; there were spened during same period 746 accounts, leaving open December 1, 1896, 4,198 accounts.

accounts, leaving open December 1, 1896, 4,198
accounts.

Cumberland Dugan,
Daniel Donnelly,
V. J. Brown,
Albert T. Myer,
F. K. Murphy.

In accordance with Article IV of the By-Laws,
the investments have been examined by a committee NOT CONNECTED WITH THE MANAGEMENT OF THE CORPORATION, who
thus chara terize them—the loss and investments have been safely and judiciously made,
and the securities held are ample.

Committee

Committee

AUSTIN JENKINS,
of NonSIGNEY

ALLAN MCSHERRY,
Directors.

B. F. NEWCOMER.

STATEMENT OF

THE PROVIDENT SAVINGS BANK.

Funds on hand December 31, 1895.... \$894,228 72
Received from depositors
du ing 1896 \$683,973 88
Received from interest on
investments less preminvestments less premium charged off, 1896.... 41,829 42

725,803 30

2,123 80 682,470 33 Funds on hand December 31, 1896... \$937,561 69

DAVID AMBACH, H. IRVINE KEYSER, MILES WHITE, JR.

GERMAN SAVINGS BANK OF BALTIMORE CITY,

S. W. Cor. Baltimore and Eutaw Streets.

At the request of the Directors of the GERMAN SAVINGS BANK OF BALTIMORE the undersoft the Bank for the past year and report as follows:

Amount of funds December 31, 1895...\$1,847,206 62
Received from depositors during the

\$2,871,097 23 23,794 35 1,006,541 13

JOHN L. WILLIAMS & SONS, BANKERS,

RICHMOND, VA.

Southern Investment Securities, MUNICIPAL BONDS A SPECIALTY.

Correspondence Invited.

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UNITED STATES ENGINEER OFFICE Duluth, Minn., December 16, 1896—Sealed proposals for dredging about 21 000,000 cubic yards in the harbor of Duluth, Minn, and Superior, Wis., will be received here until noon February 15, 1897, and then publicly opened. Information furnished on application. CLINTON B. SEARS, Major, Engrs.

TREASURY DEPARTMENT, Office Supervising Architect, Washington, D. C., December 30, 1896 Sealed proposals will be received at this office until 2 o'clock P. M. on the 27th day of January, 1897, and opened immediately thereatter for all the labor and materials required for the plambing and gas piping for the U. S. Postoffice building at Washington, D. C., in accordance with the drawings and specification, copies of which may be had at this office or the office of the Superintendent at Washington, D. C. Each bid must be accompanied by a certined check for a sum not less than two per cent. of the amount of the proposal. The right is reserved to reject any or all bids and to waive any detect or informality in any bid, should it be deemed in the interest of the Government to do so. All bids received after the time stated for opening will be returned to the bidders. WM. MARTIN AIKEN, Supervising Architect.

CHIEF ENGINEER'S OFFICE, WATER DEPARTMENT, CITY HALL,
BALTIMORE, December, 1896.
TO BUILDERS OF PUMPING MACHINERY.

TO BUILDERS OF PUMPING MACHINERY. SEALED PROPOSALS, indorsed "Proposals for Pumping Engines and Appurte ances" will be received at this office until 12 o'clock noon, Monday, February 1st, 1897, for the CONSTRUCTION, DELIVERY AND COMPLETE ERECTION OF 1WO 17,500,000 GALLON PUMPS, ONE 10,000,000 GALLON PUMP AND FOUR 1,500,000 GALLON PUMPS. The Water Board reserves the right to reject any or all bids. Specifications can be obtained upon application at this office on and after January 2, 1837. by ordersof the Water Boa.q.

WM. L. KENLY, Chief Engineer.

WM. L. KENLY, Chief Engineer.

CHIEF ENGINEER'S OFFICE, WATER DEPARTMENT, CITY HALL,
BALTIMORE, December, 1896.

SEALED PROPOSALS, ind_rsed "Proposals for Water Tube Steam Boilers and Appurtenances," will be received at this office until February 1, 1897 for the CONSTRUCTION, DELIVERY AND COMPLETE ERECTION OF TWO BATTERIES OF TWO SIEAM BOILERS, EACH OF 200 HORSE POWER, MAKING SOO HORSE POWER IN ALL; ONE BATTERY OF TWO STEAM BOILERS OF 200 HORSE POWER EACH, AND ONE BATTERY OF TWO STEAM BOILERS OF 50 HORSE POWER EACH.

The Water Board reserves the right to reject any or all bids. Specifications can be obtained on application at this office on and after January 2, 1897. By order of the Water Board.

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Harper's Weekly IN 1897.

WITH the end of 1896 HARPER'S WEEKLY will have lived forty years. In that time it has participated with all the zeal and power at its command in the great political events of the most interesting and important period in the history of the country, and it has spread before its readers the accomplishments of science, arts, and letters for the instruction of the human mind and the amelioration of human conditions and of manners. What the WEEKLY bas been in its spirit and purpose, as these have been manifested principally in its editorial pages, it will continue to be. It is impossible to announce with precision all that the WEEKLY will contain during the year 1897. It were as easy to announce with precision all that the WEEKLY will contain during the year 1897. It were as easy to announce what is about to happen in the world, what triumphs for good government are to be won, what advances of the people are to be made, what is to be the outcome of the continuous struggle between the spirits of war and peace, what is to happen in the far East, what is to be the state of Europe twelve months hence, what new marvels of science are to be revealed, or what are to be the achievements of arts and letters, for the WEEKLY is to be a pictorial record of all this. Cartoons will continue to be a feature.

Serial Stories. A New England story by Miss MARY E. WILKINS, will begin in January. A tale of a Greek uprising against the Turks, by Mr. JOHN KENDRICK BANOS, illustrated by Mr. PETER NEWELL.

More Short Stories will appear in the WEEKLY than it has been possible to publish during 1896.

Departments: Mr. W. D. Howells's "Life and Letters" have been among the most charming features of periodical literature; Mr. E. S. MARTIN, and others, will con ribute observations on what is going on in "This Busy World;" "Amateur Sport" will remain the most important department of its kind in the country.

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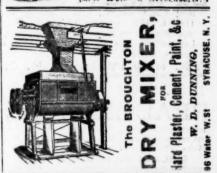
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lmost new, Engine, Boiler, Band Mill, two angs, Lath and Picket Mill, Tracks, etc. Also 6000 feet T Rails. Sold a bargain on very easy terms. Address

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CHARLESTON, S. C. For Sale Several Fine Residences and Choice Building Lots.

An ideal city for a winter home, full of historic interest, and a climate soft and mild in winter, but not hot enough to be enervating. Cost of living is cheap.

The City of Charleston's water supply is obtained from artesian wells, and it has recently been proven to be a valuable dyspeptic cure when used as drinking water, and a rhoumatic cure when bathed in hot.

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A Complete Plant of Machinery for the manufacture of

There is no manufactory of this kind in the Southern States. Terms reasonable. Address

R. M. WILSON,

\$20,000

An active, energetic partner wanted in an established MANUPACTURING USINESS The P'ant is well located in the South, as to railway facilities, raw material, etc., and now commands a trade for its whole product. The sbove amount will purchase a half interest and furnish the extra working capital required. Address

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To a quick buyer. Land, 36 acres, 752 ft. wharves, loading sheds, floor space 15,264 square feet piling room; receiving sheds floor space 27,971 square feet piling room; office building; stable; planing mill, two 75 h. p. engines; boilers; line shafting; six flooring machines; one 9 in. molding machine; three re-saws; 30-in. surfacer; three gang rips; electric-light plant for mill use, fifty lights; seventy Tonawanda trucks: all well known as the planing mill plant of The G. H. Toadvine Lumber Co., of Elizabeth City, N. C., 46 miles south of Norfolk. Rates to Philadelphia, Pa., 12½ cts.; Newark, N. J., 14½ cts.; Boston, Mass., 20 cts.

This plant is in first-class running order, has 2.000,000 feet of dry lumber on hand. The location commands most of the short-leaf pine territory of North Carolina. Lumber received and shipped either by rail or water. Railroad and water rates both for incoming and outgoing lumber compete with the most favored locality. Just the opportunity for owners of short-leaf pine stumpage. Terms casy. Apply to

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FOR SALE.—Large and small bodies of Timber Lands, White Oak, Poplar, Cypress, Red Oak, Elm, Ash, Hickory, Pine.

24,328 Acres of Land

For sale at very low prices and on easy terms. The greater part of these lands are just the thing for colonies of industrious farmers and fruit-growers. I also have Gold Mines, Mica Mines and Water Powers on my list of desirable lands for sale. Correspondence solicited.

S. GALLERT,

RUTHERFORDTON, N. C.

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Where Real Estate has increased 500 per cent. in the last few years. If you contemplate going South, why not go where there is no over-production of agricultural products, there is no over-production of Sugar or Rice, the two principal crops of this section.

Choice fruits and early vegatables always bring good prices, especially if placed on the market of the world when other sections of the country are frozen up.

If you want to enjoy perfect health and live where all the conditions of life are most favorable, then seek the Coast Country of Southwest Louisiana, of which the town of CROWLEY is the centre.

A FINE STOCK COUNTRY, RICH FRUIT LANDS well adapted to the growing of Hay, Oats, Corn, Cotton, Rice, Sugar-cane and all of the semi-tropica! fruits. The opportunities that are there offered are fast being taken up. If you will write to

W. W. DUSON & BRO.

CROWLEY, LA., they will send you a map of this section and their new book, "Come and See," which will furnish you ROME, N. Y. full information about this favored land.

WANTED by a well known and es-tablished engineering and con-tracting company a YOUNG CIVIL ENGINEER—one who has some capital and can take an interest. Address 2405 GLENWOOD AVENUE,

TOLEDO, OHIO.

WANTED.

TO INVEST \$5000 IN GOOD BUSINESS,

Established one preferred, but not necessary Has office management at present. OFFICE,

Care Manufacturers' Record

MANUFACTURERS' attention is called to the large six-story Central Power Station of the Capital Traction Company, covering an entire block in the very centre of the business section of the nation's capital city. Suitable space for light manufacturing plants and other business, with power, heat and electric light, can be obtained at moderate rates. Address

CAPITAL TRACTION COMPANY,

COAL 891 acres on railroad and waters of the Monongahela River, 6 miles from Clarksburg, W. Va. Pittsburg vein 9 feet thick. Unex elled for fuel, coke or gas. Owner is growing old and in feeble health, and will sell VERY LOW.

will sell VERY LOW.

TIMBER Geveral: tracts ranging from 300
to \$5,000 acres of virgin forests of Hemlock, Spruce, White Pine, Poplar, Oak, Cherry, etc., at reasonable prices. Titles perfect. Guaranteed to come up to representations. Estimates and full particulars on application.

OIL Territory in O.l-producing belt of West Virginia for sale and for development.

\$20,000 Wanted for three years at 6 per cent. Secured by first mottaged on real estate worth

\$50,000. Address

THE SOUTHERN REAL ESTATE EXCHANGE, CLARKSBURG, W. VA.

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Advertisements under this head are inserted free of charge for readers of the MANUFACTURERS' RECORD. Advertisements must not exceed five lines—about thirty words—and four insertions will be given without charge.

WANTED.—A high-grade salesman who is well edu-ated and a thorough mechanic. One who is well up on pumps, heaters, mechanical fitters, etc. Apply with references, stating past experience, age a so salary expected. Address T. W. J., care Manufacturers' Record.

WANTED-A competent and thoroughly experienced acidmaker; must be sober and furnish satisfactory credentials from former employer; none other need apply. Address NATIONAL FERTILIZER CO., Nashville,

WANTED—An engineer for a fertilizer plant; must be used to working iron pulverizing mills (Narod and Griffin), etc.; references neces-sary. Apply to LITTLE BROS. FERTILIZER & PHOSPHATE CO., Jacksonville, Fla.

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WANTED. POSITION as GENERAL MANAGER OR SUPERINTENDENT to Operate or Construct Railroad Thirty years' experience. Thoroughly competent to fill either place. Am an all-round railroad man from the chain up. Keep up machinery, rolling stock, &c. Machinist by trade Address SUPERINTENDENT, Manufacturers' Record, Baltimore, Md.

WANTED.—An experienced civil engineer desires to learn of a city that offers a good opening for a civil engineering business, or will connect himself with firm having an established practice Address Experienced C. E., care Manufacturers' Record.

WANTED—Position in cottonseed oil mill by young man having ten years' experience in construction and erection of modern hydraulic and other oil mill machinery in general; good references. Address COTTON, care Manufacturers' Record.

POSITION as department foreman or general superintendent in such and door factory, by man of eighteen years' practical experience in all branches of the business. Address W. L. BOLLARD, 294 Willis Street, Chicago, Ill.

STRUCTURAL and ornamental iron; outside man; estimator or superintendent; ten years' experience; open to engagement first of year. Address STRUCTURAL, care Mfrs. Record. j22

WANTED—A situation in the South as machibist or engineer; am thirty eight years' old, married and strictly temperate; at present have full charge of all repair work in a 3000 horsepower plant; can furnish best of references from present employer. Address J. M. BEAVO, Gas City, Ind.

WANTED—Position as superintendent with some first-class fertilizer company by one who understands how to make sulphuric acid from pyrites and brimstone; can give excellent references. Address S, F., care Mfrs. Record.j22

CENTLEMAN of good appearance and address, possessing tact and judgement, desires position to handle specialty or as manufacturers' agent. Address GOOD, 115 Harvey St., Germantown, Philadelphia

YOUNG man, aged twenty, wants position with reliable firm; is an experienced stenographer, has knowledge of bookkeeping, and is steady and honest; good references. Address VIRGINIAN, care Manufacturers' Record. j22

WANTED—A position as foreman with a Southern lumber or coal company, or on grading, track laying, timber, etc.; have had twenty-four years' experience, and can furnish At references Address W. M., care Manulacturers' Record.

WANTED—A position as manager or superintendent in a canning factory; thirty vears' experience and thorrughly competent in all branches; can give good references. Address J. L. FRITZ, 22 Davidson St., Watertown, N.Y. jig

A PRACTICAL millwright seeks a position to take charge of erecting factories, mills or machinery in the South or West, or would take position in factory to keep machinery in order; age forty: recommendations as to ability. Address H. L. KENT, 213 Green Avenue, Brooklyn, N. Y.

WANTED AGENCY—Engineers having office would like to represent some firm manufacturing first class specialty for steam or electric plants. Address ENGINEERS, 131 F Chemical Building. St. Louis, Mo.

YOUNG man traveling would like to sell on commission, staple goods, such as plumbers' supplies, mechanical specialties, etc.; good reference. Address F. HARDEN, 39 Markham Street, Atlanta Ga.

WANTED-Position by a young man; Ar tele graph operator; large experience; highest credentials; reasonable compensation; anywhere. Address A. G. Lock Box 44 Senoia, Ga. j15

OPEN for engagement as lumber buyer for reliable manufacturer or dealer, or would take charge of saw and planing mill; any one desiring su h help please correspond with me for particulers. J 1. D., Box 122, Murray, Ky. j8

WANTED-Position as bookkeeper or super-intendent for a reliable firm of railroad contractors, by a young man with fourteen years' experience who thoroughly understands railroad grading. Address COMPETENT, care Manufacturers' Record,

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BOOKKEEPER, thoroughly experienced in manuf cturing business seeks a position; single; location no object; accustomed to making up large pay rolls. keeping time, calculating cost. Address FRANK ROSE, 128 High Street, Brooklyn, N. Y.

SITUATION as engineer and machinist; capa-ble of taking charge of large plant; eighteen years' experience: reference from present em-ployer. Address ED. HAMMOND, Box No. 54, Lourey P. O., Md.

WANTED—A situation as superintendent or foreman in planing mill or sash, door and blind factory; thoroughly understand woodworking machinery, and have had considerable experience in getting out finished material for cotton mills, also in manufacturing finished building material of all kinds; first-class reference; Georgia or North Carolina preferred. Address C. S. E., care Manufacturers' Record.

WANTED—By a young man twenty-seven years old g aduate of one of the best schools of mechanical engineering in the West, a position as assistant to manager or contracting salesman; has had three years' apprenticeship as machinist, and three years as expert draftsman and designer; at present o cupying a responsible position as engineer of construction in a large plant; recommendations from present and former employers. Address VIM, care Mfrs. Record. js

MECHANICAL FNGINEER, Stevens graduate, desires position with engineering or contracting firm. Has extensive experience in handling men and machinery, is rapid calculator and good draughtsman; best references. Address W. B. POWELL, 27 Brevoort Place, Brooklyn, N. V.

WANTED-Position as manager or assistant by man who thoroughly understands the manufacture and sale of lumber; have had four-teen years' experience, and can furnish first-class references. Address C. H. W., care Manufac-turers' Record.

A N A No. 1 sa'esman on saw mill or other heavy machinery, including power plants is open for a position; can design and erect plants. Address SALESMAN, care Mfrs. Record.

RESPONSIBLE party with good record as mechanical engineer, designer and superintendent of shops for medium and heavy machinery, open for engagement; can guarantee plenty of work on patented machines. Address P.O. Box 217, Baltimore, Md.

WANTED-By a young man of twenty-nine, a permanent situation with a good manufacturing or commercial firm as shipping or stock clerk, or as assistant bookkeeper; experienced, competent and willing to make himself generally useful; no objection to going South, and can furnish best of references. Address E. A. B., No. 114 W. 23d St., Baltimore, Md.

Wanted—An Idea Who can think of some simple thing to patent?
Protect your ideas; they may bring you wealth.
Write JÖHN WEDDERBURN & CO., Patent Attorneys, Washington, D. C., for their \$1,800 prise offer and list of two hundred inventions wanted.

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Is the oldest and financially the strongest organization of its kind, working in one interest and under one management, with more capital invested in the business, and expends more money every year for the collection and dissemination of its information than any similar institution in the world. Its reports are considered in the light of a guide by both investors and those contemplating the granting of credit. In addition to a large corps of skilled employes, more than one hundred thousand correspondents contribute the result of their investigation and opinions. Subscriptions are annual, and may commence at any time the subscriber elects. Details as to prices and terms will be furnished upon application.

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